Usenet Newsgroup Archive: rec.radio.amateur.digital.misc

1993

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Date span: 1993-07-02 through 1993-12-31

Source text: rec.radio.amateur.digital.misc.txt

Source item: https://archive.org/details/usenet-rec

Messages included in this PDF: 1,256

Message records with no readable body available in the source text: 11

Messages are presented chronologically by archived date.

Binary or encoded payloads are not printed as blocks of encoded text; a placeholder appears where such material was detected. The original source text is unchanged.

1. Re: MAKE.MONEY.FAST

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-02 07:06:25 UTC
From: zra60100@nfhsg2.rus.uni-stuttgart.de
Message-ID: <210mph$1cme@info2.rus.uni-stuttgart.de>
Source record: 51840
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.space,soc.culture.austria,alt.games.mk,alt.sex.fetish.amputee,alt.sports.baseball.sf-giants,alt.unsubscribe-me,alt.video.games.reviews,alt.wesley.crusher.die.die.die

In article <C9I1vD.rCo@ns1.nodak.edu> msjurset@plains.NoDak.edu (Mark Sjurseth) writes:
>
>1) IMMEDIATELY mail $1.00 to the five names listed below, starting at #1.
> Send cash only please (total investment on your part is $5.00). Enclose
> a note with each letter stating:

just don't make things too complicated. if you want to get rid of your money
just send it to me. any currency and amount is accepted.

michael

Michael Resch Phone: ++49 (0)711-685-5834
Rechenzentrum Universitaet Stuttgart Fax: ++49 (0)711-678-8363
Numerical Methods for Supercomputers
Allmandring 30 email: resch@rus.uni-stuttgart.de
70550 Stuttgart
Germany
----

2. Re: MAKE.MONEY.FAST

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-02 12:46:08 UTC
From: segrest@bobseg.enet.dec.com
Message-ID: <211amg$m1r@sousa.ako.dec.com>
Source record: 51841
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.space,soc.culture.austria,alt.games.mk,alt.sex.fetish.amputee,alt.sports.baseball.sf-giants,alt.unsubscribe-me,alt.video.games.reviews,alt.wesley.crusher.die.die.die

This note is a clear cut vote for better conference moderation. Stupid chain letters have been around too long and it is a great disapointment for me to see that we are being plagued with this childish dung here. It has nothing to do with the purpose of this notes file and should not be tolerated.

--
Bob Segrest
segrest@bobseg.enet.dec.com

3. Re: AX.25 spec and the network layer ?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-02 13:14:53 UTC
From: mccarthy@splinter.synnet.com
Message-ID: <C9JGsu.EBz@pau.synnet.com>
Source record: 51842

In article <1993Jul2.035937.7181@fcom.cc.utah.edu>, dave@fcom.cc.utah.edu (Dave Martin) writes:
|> How different is AX.25 from regular X.25? I may be needing to develop
|> an AX.25 driver. What is the best way to go about this? I don't suppose AX.25
|> spec is online somewhere?
|>
I don't know if it's on-line anywhere, but the ARRL will sell you
a copy of the spec.
The major differences are half duplex, addressing is done with callsigns, there
are 8 added fields for "poor mans routing" through digipeters, and a bit which
indicates if the packet has been repeated. Otherwise, it is very close to LAPD.
There is only the link layer (level 2?) and no packet layer in the specification.

Mike

4. Re: JNOS 1.09

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-02 14:12:53 UTC
From: bbattles@arrl.org
Message-ID: <1678@arrl.org>
Source record: 51843

Cheesh...there's a JNOS 1.09 already? I just found 1.08n! The C Weenies must be busy little beavers! I imagine 1.09 (executable) is on ucsd.edu. (If not, please tell me where to get it.)

CUL es 73 de Brian, WS1O
ws1o@ws1o.ampr.org [44.88.0.87]
bbattles@arrl.org
"""
Brian Battles, WS1O I Tel 203-666-1541, ext 222 I "Radio amateurs
QST Features Editor I Fax 203-665-7531 I do it with
ARRL HQ I Internet bbattles@arrl.org I great frequency"
Newington, CT USA I Amprnet ws1o@ws1o.ampr.org I
""".

5. TCP/IP under OS/2?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-02 14:39:25 UTC
From: bbattles@arrl.org
Message-ID: <1680@arrl.org>
Source record: 51844

Is there anyone who's operating TCP/IP packet radio under IBM OS/2? I'm running JNOS108N under OS/2 2.1, and haven't quite figured out how to get PMNOS by Walt Corey, KZ1F, to run on my machine. (I have an 80486sx-25 with 16 megs of RAM, a 340-meg hard drive, and an AEA PK-232MBX with an Alinco DR-112 2-meter rig. I also have a Gracilis PackeTwin system to run 9600-baud packet via our local 440-MHz TCP/IP repeater.)

I'd like to see a little discussion of OS/2 and packet; I just put OS/2 2.1 on my machine and it seems to offer a lot of interesting possibilities!

CUL es 73 de BB

"""

Brian Battles, WS1O I Tel 203-666-1541, ext 222 I "Radio amateurs
QST Features Editor I Fax 203-665-7531 I do it with
ARRL HQ I Internet bbattles@arrl.org I great frequency"
Newington, CT USA I Amprnet ws1o@ws1o.ampr.org I
"""
"""

Brian Battles, WS1O I Tel 203-666-1541, ext 222 I "Radio amateurs
QST Features Editor I Fax 203-665-7531 I do it with
ARRL HQ I Internet bbattles@arrl.org I great frequency"
Newington, CT USA I Amprnet ws1o@ws1o.ampr.org I
"".

6. DTMF Decoder chip

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-02 17:09:30 UTC
From: hanner@sumax.seattleu.edu
Message-ID: <211q4aINNulc@sumax.seattleu.edu>
Source record: 51845

I've been trying to build a home-brew DTMF decoder for years, but I can't find a chip to do it. Radio Shack used to sell one for about $10 but it has long since been discontinued.

I'm looking for info on either a DMTF decoder chip OR a schematic to build a DMTF decoder from available parts.

Thank you,
Curtis Hanner
N7MWC

7. Re: MAKE.MONEY.FAST

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-02 21:21:45 UTC
From: tad@ssc.com
Message-ID: <1993Jul02.212145.139@ssc.com>
Source record: 51847
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.space

In article <C9I1vD.rCo@ns1.nodak.edu> msjurset@plains.NoDak.edu (Mark Sjurseth) writes:
> *INSTRUCTIONS*
>
>Follow these instructions EXACTLY, and in 20-60 days you will have received
>well over $50,000 in cash, all yours. This program has remained successful
>because of the honesty and integrity of the participants. Please continue
>its success by carefully adhering to the instructions.

Thanks, idiot....for posting your stupid and illegal chain letter scam.

>
>
>4) Within 60 days, you will receive approximately $50,000 in CASH. (Amounts
> will vary, of course) Keep a copy of this file for yourself so that you
> can use it again whenever you need money again. As soon as you mail out
>
>#2 Aaron Sprout
> 400 N River Rd. #1313
> West Lafayette, IN 47906
>
>#3 Brian Servis
> 400 North River Road #1435
> West Lafayette, IN 47906-3151
>
>#4 Marvin Ratchford
> 5801 Haines NE #44
> Albuquerque, NM 87110
>
>#5 Mark Sjurseth
> 2109 N. 2nd st.
> Fargo, ND 58102
>
>

If you want to complain, the US POSTAL INSPECTOR'S office that serves
Fargo is in Minneapolis. Call Heather at 612-293-3200, or fax
her at 612-293-3384.

Tell her you are complaining about MARK SJURSETH.

Feel free to call other postal inspection offices to complain about
other scam-artists on this list.

--
| tad@ssc.com (if it bounces, use 3288544@mcimail.com) |

| Tad Cook | Packet Amateur Radio: | Home Phone: |
| Seattle, WA | KT7H @ N7DUO.WA.USA.NA | 206-527-4089 |

8. Re: TCP/IP under OS/2?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-02 23:33:22 UTC
From: feustel@netcom.com
Message-ID: <feustelC9K9Fo.EsM@netcom.com>
Source record: 51846

bbattles@arrl.org (Brian Battles WS1O) writes:

>Is there anyone who's operating TCP/IP packet radio under IBM OS/2? I'm
>running JNOS108N under OS/2 2.1, and haven't quite figured out how to get
>PMNOS by Walt Corey, KZ1F, to run on my machine. (I have an 80486sx-25 with 16

What's PMNOS, a dos or os/2 program?
--
Dave Feustel N9MYI <feustel@netcom.com>

FREE! FREE!!! THANK GOD ALMIGHTY! FREE AT LAST!

9. Re: AX.25 spec and the network layer ?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-03 01:48:58 UTC
From: dave@esi.COM.AU
Message-ID: <4182@eram.esi.COM.AU>
Source record: 51848

In article <C9JGsu.EBz@pau.synnet.com>,
mccarthy@splinter.synnet.com (Mike McCarthy) writes:

| The major differences are half duplex

I thought it was full-duplex; it's just hardly ever used that way...

--
Dave Horsfall (VK2KFU) VK2KFU @ VK2RWI.NSW.AUS.OC PGP 2.3
dave@esi.COM.AU ...munnari!esi.COM.AU!dave available

10. mfj 1278 and Fax?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-03 14:38:20 UTC
From: mark@ardsley.business.uwo.ca
Message-ID: <mark.242.741710300@ardsley.business.uwo.ca>
Source record: 51849

Is there a program out there that will allow me to receive fax with a mfj 1278? I bought the mfj-com program 2 years ago and have never been able to get it to install ok with dos 5, and I now have dos 6.

I downloaded jvfax51, but it appears to want a special demodulator.

Does anyone have any ideas? Also, what is the latest rom level?

=-=-=-

11. Re: MAKE.MONEY.FAST

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-03 15:02:04 UTC
From: rcanders@nyx.cs.du.edu
Message-ID: <1993Jul3.150204.23025@mnemosyne.cs.du.edu>
Source record: 51850
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.space

Please email comemnts to the person who started this thread, don't reply
in the news groups because he isn't reading the newsgroups.

If some jerk posts s__t like this to a newsgroup _never_ reply in the
newsgrou, just send email to the jerk.

--
Rod Anderson N0NZO | "I do not think the United States government
Boulder, CO | is responsible for the fact that a bunch of
rcanders@nyx.cs.du.edu | fanatics decided to kill themselves"
satellite N0NZO on ao-16 | Slick Willie the Compassionate

12. Re: MAKE.MONEY.FAST

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-04 02:12:50 UTC
From: jim@inqmind.bison.mb.ca
Message-ID: <4B656B1w165w@inqmind.bison.mb.ca>
Source record: 51851
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.spac

rcanders@nyx.cs.du.edu (Mr. Nice Guy) writes:

> Please email comemnts to the person who started this thread, don't reply
> in the news groups because he isn't reading the newsgroups.
>
> If some jerk posts s__t like this to a newsgroup _never_ reply in the
> newsgrou, just send email to the jerk.

Isn't that what he REALLY wants? Attention? Better that "the smart
people of this world" IGNORE HIM. Maybe he'll/it'll go away.

Jim
The opinions expressed are TOTALLY m'own and not of the sysops'.

jim@inqmind.bison.mb.ca
The Inquiring Mind BBS, Winnipeg, Manitoba 204 488-1607

13. Re: TCP/IP under OS/2?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-06 08:19:19 UTC
From: RM4Y@DLRVMS.GO.DLR.DE
Message-ID: <C9qHs7.D6L@dnsserv.go.dlr.de>
Source record: 51852

In <1680@arrl.org> bbattles@arrl.org writes:

> Is there anyone who's operating TCP/IP packet radio under IBM OS/2? I'm
> running JNOS108N under OS/2 2.1, and haven't quite figured out how to get
> PMNOS by Walt Corey, KZ1F, to run on my machine. (I have an 80486sx-25 with 16
> megs of RAM, a 340-meg hard drive, and an AEA PK-232MBX with an Alinco DR-112
> 2-meter rig. I also have a Gracilis PackeTwin system to run 9600-baud packet
> via our local 440-MHz TCP/IP repeater.)

I tried this,but had problems too, no documentation. I did get it running, but
I could not get PMAIL to work. Anyhow, just now, I have a hardware problem so
I have removed it.

>
> I'd like to see a little discussion of OS/2 and packet; I just put OS/2 2.1 on
> my machine and it seems to offer a lot of interesting possibilities!

Me too, and other ham utils.

>
> CUL es 73 de BB
>
> """
> Brian Battles, WS1O I Tel 203-666-1541, ext 222 I "Radio amateurs
> QST Features Editor I Fax 203-665-7531 I do it with
> ARRL HQ I Internet bbattles@arrl.org I great frequency"
> Newington, CT USA I Amprnet ws1o@ws1o.ampr.org I
> """
> """
> Brian Battles, WS1O I Tel 203-666-1541, ext 222 I "Radio amateurs
> QST Features Editor I Fax 203-665-7531 I do it with
> ARRL HQ I Internet bbattles@arrl.org I great frequency"
> Newington, CT USA I Amprnet ws1o@ws1o.ampr.org I
> "".

Victor Wood |
| The law of inanimate reproduction:
RM4Y@VM.OP.DLR.DE |
| "If you take something apart and
| put it back together again enough
ROSAT Control K4 | times, you will eventually have
German Space Operations Center | enough parts left over to build
Muenchenerstr. 20 | a second one."
D-82234 Oberpfaffenhofen |
+49 81 53 28 14 22

++

14. TCP/IP Address

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-06 10:14:00 UTC
From: stocker@nssdca.gsfc.nasa.gov
Message-ID: <6JUL199306141830@nssdca.gsfc.nasa.gov>
Source record: 51853

Does anyone know to whom I have to apply to get a TCP/IP address here in Maryland. I wrote to the person listed as the coordinator for this area in a text file I found on the buffalo server. I included a SASE knowing that these individuals are volunteers. However, I have not received anything nor has the letter been returned. I figure the ham I sent the note to must no longer be the coordinator and just kept the SASE for his own use.

I am, however, interested in getting the TCP/IP address. So, if anyone could send me the right person and the correct address or application procedure, I would greatly appreciate it.

Erich
N3OXM

15. Re: High bandwidth packet radio

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-06 18:11:19 UTC
From: glenne@sr.hp.com
Message-ID: <C9r96v.4r7@srgenprp.sr.hp.com>
Source record: 51854

H. Peter Anvin N9ITP (hpa@ahab.eecs.nwu.edu) wrote:
: Hello,
: Does anyone here have any information on high bandwidth packet radio?
: The amateur radio club here at Northwestern are thinking about setting
: up such a system, and we would appreciate pointers from people more
: experienced than ourselves.

Please see ARRL Computer Networking Conference proceedings #8,9 and 10
for an overview, theoretical justification of our approach, a particular
implementation and a status update of our progress. Other references are
included within these papers.

73
Glenn Elmore n6gn

N6GN @ K3MC
amateur IP: glenn@SantaRosa.ampr.org
Internet: glenne@sr.hp.com

16. tcp-group still active?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-07 10:20:08 UTC
From: paul@topsy.demon.co.uk
Message-ID: <742040408snz@topsy.demon.co.uk>
Source record: 51857

Does anyone know (especially the folks at ucsd) if the tcp-group is still active? I'd like to join but I haven't seen anything of the digests for months in the uk.

tnx, Paul G1PJJ
--
==
| Paul Turvey "Modestly, unique" Amateur: g1pjj@gb7zaa.#34.uk.eu |
| Email: paul@topsy.demon.co.uk Amprnet: paul@g1pjj.ampr.org |
==

17. Multimode suggestions wanted

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-07 15:10:59 UTC
From: debaker@bnr.ca
Message-ID: <21ep23$ij@crchh327.bnr.ca>
Source record: 51855
Cross-posted to: rec.radio.amateur.packet,rec.radio.amateur.digital.misc,rec.radio.amateur.swap

Greetings,

I am interested in hearing from anyone who has either an MFJ 1278
or a KAM/KAM Plus. These two units seem to be very similiar,
but the MFJ really appears to offer more for the money, but the
KAM seems like better quality... How about modems? The MFJ
looks like it can easily be upgraded to 2400 or 9600, but the
KAM is not, right? (or requires thier Data Engine?) Please
send email with your experiences (good and bad) and any
recommendations on these products, or any other comparable devices.

Thanks!

73

____
| David E. Baker Opinions expressed are |
| Callsign: KJ5ML mine, and they do not |
| Internet: debaker@bnr.ca necessarily reflect |
| IP Addr: 47.122.65.7 the opinions of BNR or |
Unix ID: crchh7b0 or Northern Telecom.

18. Guide to the Personal Radio Newsgroups

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-07 16:27:53 UTC
From: pschleck@unomaha.edu
Message-ID: <radio/personal-intro-1-742062461@unomaha.edu>
Source record: 51856
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.packet,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.info,rec.answers,news.answers

```
Posted-By: auto-faq 2.4
Archive-name: radio/personal-intro
Revision: 1.4 06/30/93 12:04:14
Changes: new rec.radio.amateur.* newsgroups, cs.utexas.edu gateway

(Note: The following is reprinted with the permission of the author.
Due to the recent reorganization, it is also on a temporarily-
accelerated posting schedule as follows:

July weekly
August bi-weekly
September back to monthly)

This message describes the rec.radio.amateur.*, rec.radio.cb, rec.radio.info,
and rec.radio.swap newsgroups. It is intended to serve as a guide for the new
reader on what to find where. Questions and comments may be directed to the
author, Jay Maynard, K5ZC, by Internet electronic mail at
jmaynard@oac.hsc.uth.tmc.edu. This message was last changed on 30 June 1993 to
add the groups created during the latest reorganization vote and the
description of the cs.utexas.edu gateway.

History
=======

Way back when, before there was a Usenet, the Internet hosted a mailing list
for hams, called (appropriately enough) INFO-HAMS. Ham radio discussions
were held on the mailing list, and sent to the mailboxes of those who had
signed up for it. When the Usenet software was created, and net news as we
now know it was developed, a newsgroup was created for hams: net.ham-radio.
The mailing list and the newsgroup were gatewayed together, eventually.

As the net grew, and as packet radio came into vogue, packet discussion began
to dominate other topics in the group and on the list. This resulted in the
logical solution: a group was created to hold the packet discussion, and
another corresponding mailing list was created as well: net.ham-radio.packet
and PACKET-RADIO, respectively.

These two groups served for several years, and went through Usenet's Great
Renaming essentially unchanged, moving from net.ham-radio[.packet] to
rec.ham-radio[.packet]. Readership and volume grew with the rest of the
network.

The INFO-HAMS mailing list was originally run from a US Army computer at
White Sands Missile Range, SIMTEL20. There were few problems with this
```

arrangement, but one was that the system was not supposed to be used for commercial purposes. Since one of hams' favorite pastimes is swapping gear, it was natural for hams to post messages about equipment for sale to INFO-HAMS/rec.ham-radio. This ran afoul of SIMTEL20's no-commercial-use restriction, and after some argument, a group was created specifically for messages like that: rec.ham-radio.swap. This group wasn't gatewayed to a mailing list, thus avoiding problems.

While all this was happening, other folks wanted to discuss other aspects of the world of radio than the personal communications services. Those folks created the rec.radio.shortwave and rec.radio.noncomm newsgroups, and established the precedent of the rec.radio.* hierarchy, which in turn reflected Usenet's overall trend toward a hierarchical name structure.

The debate between proponents of a no-code ham radio license and its opponents grew fierce and voluminous in late 1989 and 1990. Eventually, both sides grew weary of the debate, and those who had not been involved even more so. A proposal for a newsgroup dedicated to licensing issues failed. A later proposal was made for a group that would cover the many recurring legal issues discussions. During discussion of the latter proposal, it became clear that it would be desirable to fit the ham radio groups under the rec.radio.* hierarchy. A full-blown reorganization was passed by Usenet voters in January 1991, leading to the overall structure we now use.

After the reorganization, more and more regular information postings began to appear, and were spread out across the various groups in rec.radio.*. Taking the successful example of the news.answers group, where informational postings from across the net are sent, the group rec.radio.info was created in December, 1992, with Mark Salyzyn, VE6MGS, initially serving as moderator.

In January, 1993, many users started complaining about the volume in rec.radio.amateur.misc. This led to a discussion about a second reorganization, which sparked the creation of a mailing list by Ian Kluft, KD6EUI. This list, which was eventually joined by many of the most prolific posters to the ham radio groups, came up with a proposal to add 11 groups to the rec.radio.amateur hierarchy in April 1993. The subsequent vote, held in May and early June, approved the creation of five groups: rec.radio.amateur.digital.misc (to replace .packet), .equipment, .homebrew, .antenna, and .space.

The Current Groups

I can hear you asking, "OK, so this is all neat history, but what does it have to do with me now?" The answer is that the history of each group has a direct bearing on what the group is used for, and what's considered appropriate where.

The easy one is rec.radio.amateur.misc. It is what rec.ham-radio was renamed to during the reorganization. Any message that's not more appropriate in one of the other groups belongs here, from contesting to DX to ragchewing on VHF to information on becoming a ham.

The group rec.radio.amateur.digital.misc is for discussions related to (surprise!) digital amateur radio. This doesn't have to be the common two-meter AX.25 variety of packet radio, either; some of the most knowledgeable folks in radio digital communications can be found here, and anything in the general area is welcome. The name was changed to emphasize this, and to encourage discussion not only of other text-based digital modes, such as AMTOR, RTTY, and Clover, but things like digital voice and video as well. The former group, rec.radio.amateur.packet, has not been removed as of this writing, but it is obsolete, and you should use .digital.misc instead. The group has the .misc as part of the name to allow further specialization if the users wish it, such as .digital.tcp-ip.

The swap group is now rec.radio.swap. This recognizes a fact that became evident shortly after the original group was formed: Hams don't just swap ham radio gear, and other folks besides hams swap ham equipment. If you have radio equipment, or test gear, or computer stuff that hams would be interested in, here's the place. Equipment wanted postings belong here too. Discussions about the equipment generally don't; if you wish to discuss a particular posting with the buyer, email is a much better way to do it, and the other groups, especially .equipment and .homebrew, are the place for public discussions. There is now a regular posting with information on how to go about buying and selling items in rec.radio.swap; please refer to it before you post there.

The first reorganization added two groups to the list, one of which is rec.radio.amateur.policy. This group was created as a place for all the discussions that seem to drag on interminably about the many rules, regulations, legalities, and policies that surround amateur radio, both existing and proposed. The neverending no-code debate goes here, as does the New Jersey scanner law, the legality of ordering a pizza on the autopatch, what a bunch of rotten no-goodniks the local frequency coordinating body is, and so on.

The other added group is rec.radio.cb. This is the place for all discussion about the Citizens' Band radio service. Such discussions have been very inflammatory in rec.ham-radio in the past; please do not cross-post to both rec.radio.cb and rec.radio.amateur.* unless the topic is genuinely of interest to both hams and CBers - and very few topics are.

The rec.radio.info group is just what its name implies: it's the place where informational messages from across rec.radio.* may be found, regardless of where else they're posted. As of this writing, information posted to the group includes Cary Oler's daily solar progagation bulletins, ARRL bulletins, the Frequently Asked Questions files for the various groups, and radio modification instructions. This group is moderated, so you cannot post to it directly; if you try, even if your message is crossposted to one of the other groups, your message will be mailed to the moderator, who is currently Mark Salyzyn, VE6MGS. The email address for submissions to the group is rec-radio-info@ve6mgs.ampr.ab.ca. Inquires and other administrivia should be directed to rec-radio-request@ve6mgs.ampr.ab.ca. For more information about rec.radio.info, consult the introduction and posting guidelines that are regularly posted to that newsgroup.

The groups rec.radio.amateur.antenna, .equipment, .homebrew, and .space are for more specialized areas of ham radio: discussions about antennas, commercially-made equipment, homebrewing, and amateur radio space operations. The .equipment group is not the place for buying or selling equipment; that's what rec.radio.swap is for. Similarly, the .space group is specifically about amateur radio in space, such as the OSCAR program and SAREX, the Shuttle Amateur Radio EXperiment; other groups cover other aspects of satellites and space. Homebrewing isn't about making your own alcoholic beverages at home (that's rec.crafts.brewing), but rather construction of radio and electronic equipment by the amateur experimenter.

The rec.radio.amateur.misc, .packet, and .policy groups, and the rec.radio.info group, are available by Internet electronic mail in digest format; send a mail message containing "help" on a line by itself to listserv@ucsd.edu for instructions on how to use the mail server. The rec.radio.swap group is not available for reading by electronic mail. At this writing, the most recently added groups are also not available for reading by electronic mail, although that may change.

All of the groups can be posted to by electronic mail, though, by using a gateway at the University of Texas at Austin. To post a message this way, change the name of the group you wish to post to by replacing all of the '.'s with '-'s - for example, rec.radio.swap becomes rec-radio-swap - and send to that name@cs.utexas.edu (rec-radio-swap@cs.utexas.edu, for example). You may crosspost by including multiple addresses as Cc: entries (but see below). This gateway's continued availability is at the pleasure of the admins at UT-Austin, and is subject to going away at any time - and especially if forgeries and other net.abuses become a problem. You have been warned.

A Few Words on Crossposting

Please do not crosspost messages to two or more groups unless there is genuine interest in both groups in the topic being discussed, and when you do, please include a header line of the form "Followup-To: group.name" in your article's headers (before the first blank line). This will cause followups to your article to go to the group listed in the Followup-To: line. If you wish to have replies to go to you by email, rather than be posted, use the word "poster" instead of the name of a group. Such a line appears in the headers of this article.

One of the few examples of productive cross-posting is with the rec.radio.info newsgroup. To provide a filtered presentation of information articles, while still maintaining visibility in their home newsgroups, the moderator strongly encourages cross-posting. All information articles should be submitted to the rec.radio.info moderator so that he may simultaneously cross-post your information to the appropriate newsgroups. Most newsreaders will only present the article once, and network bandwidth is conserved since only one article is propagated. If you make regular informational postings, and have made arrangements with the moderator to post directly to the group, please cross-post as appropriate.

--
Jay Maynard, EMT-P, K5ZC, PP-ASEL | Never ascribe to malice that which can
jmaynard@oac.hsc.uth.tmc.edu | adequately be explained by stupidity.
"If my car ran OS/2, it'd be there by now" -- bumper sticker
GCS d++ p+ c++ l+ m+/- s/++ g++ w++ t+ r

--
73, Paul W. Schleck, KD3FU

pschleck@unomaha.edu

Celebrating 60 years of the Univ. of Maryland ARA - W3EAX (1933-1993)

19. Mail-order TNCs

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-07 19:58:43 UTC
From: cthomas@athena.mit.edu
Message-ID: <21f9tj$2l3@senator-bedfellow.MIT.EDU>
Source record: 51858

I received a couple responses to my last post which asked for phone numbers of mail order companies. I received the ones from AES and R+L.
Which other places does anybody prefer to order TNCs from, esp. the 1270B or 1278 accessories? I want to get some tcp/ip going and need to know which stores have good prices.

TIA,
Mike WZ0C

20. Where to find Poor Man Packet kits?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-07 22:35:02 UTC
From: jeffj@cbnewsm.cb.att.com
Message-ID: <C9tG2I.Fqv@cbnewsm.cb.att.com>
Source record: 51859

I ran across a past issue of 73 magazine and noticed the article on the Poor Man's Packet. As all of the serial ports in my PC are already in heavy use and my printer is only used part of the times, the use of the parallel port seems the way to go. Could someone tell me where to get it at? Thanks!

Jeff
--
Jeff Jones AB6MB | OPPOSE THE NORTH AMERICAN FREE TRADE AGREEMENT!
jeffj@seeker.mystic.com | Canada/USA Free Trade cost Canada 400,000 jobs.
Infolinc BBS 415-778-5929 | Want to guess how many we'll lose to Mexico?

21. PacketCluster in Corpus Cristie

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-08 00:24:51 UTC
From: n9ljx@en.ecn.purdue.edu
Message-ID: <1993Jul8.002451.10848@en.ecn.purdue.edu>
Source record: 51861

A friend of mine just moved to Corpus Christie, TX and is having problems finding a DX PAcketCluster in the area. If you know of one, or even a BBS, please forward the freq and call to me. He is having Cluster Withdrawls!

Thanks and very 73,
-scott
--
Scott Stembaugh - N9LJX internet: n9ljx@ecn.purdue.edu
Operations Supervisor, ADPC phone: 317 494 7946
Purdue University
West Lafayette, IN 47907-1061

22. Re: Where to find Poor Man Packet kits?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-08 00:46:56 UTC
From: enge@almaden.ibm.com
Message-ID: <19930707.174659.917@almaden.ibm.com>
Source record: 51860

In <C9tG2I.Fqv@cbnewsm.cb.att.com> jeffrey.n.jones writes:
>I ran across a past issue of 73 magazine and noticed the article
>on the Poor Man's Packet. As all of the serial ports in my PC
>are already in heavy use and my printer is only used part of the
>times, the use of the parallel port seems the way to go. Could
>someone tell me where to get it at? Thanks!
>
>Jeff
>--
> Jeff Jones AB6MB | OPPOSE THE NORTH AMERICAN FREE TRADE AGREEMENT!
> jeffj@seeker.mystic.com | Canada/USA Free Trade cost Canada 400,000 jobs.
> Infolinc BBS 415-778-5929 | Want to guess how many we'll lose to Mexico?
>

Also look at the port-on-a-card solutions. DRSI makes them and the
price is reasonable. PMP uses software to decode the incoming packet
and will tie up a lot of processor doing it while the DRSI cards have
a hardware decode,

23. Re: Where to find Poor Man Packet kits?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-08 09:01:38 UTC
From: jdwhite@iastate.edu
Message-ID: <C9u92r.Jqx@news.iastate.edu>
Source record: 51862

In article <19930707.174659.917@almaden.ibm.com> enge@almaden.ibm.com writes:
>In <C9tG2I.Fqv@cbnewsm.cb.att.com> jeffrey.n.jones writes:
>>I ran across a past issue of 73 magazine and noticed the article
>>on the Poor Man's Packet. As all of the serial ports in my PC
>>are already in heavy use and my printer is only used part of the
>>times, the use of the parallel port seems the way to go. Could
>>someone tell me where to get it at? Thanks!
>>
>>Jeff
>>--
>> Jeff Jones AB6MB | OPPOSE THE NORTH AMERICAN FREE TRADE AGREEMENT!
>> jeffj@seeker.mystic.com | Canada/USA Free Trade cost Canada 400,000 jobs.
>> Infolinc BBS 415-778-5929 | Want to guess how many we'll lose to Mexico?
>>
>
>Also look at the port-on-a-card solutions. DRSI makes them and the
>price is reasonable. PMP uses software to decode the incoming packet
>and will tie up a lot of processor doing it while the DRSI cards have
>a hardware decode,

I recently asked one of the origional authors of PMP about kits. Here's what
he sent back to me:

May, 1993
Hello,

Thank you for your interest in Poor Man's Packet (PMP)!
We've enclosed a couple of pages of information that should help
you get started.

We no longer have any kits available! See the
next page for details.

The Disk

The PMP disk contains a PMP11.ZIP archive with the following
files:

READFIRST.ME This file
PMP.EXE PMP executable, version 1.1
DEMO.CFG Demonstration configuration file
PMPTEST.EXE PMP test and alignment program
PMP.DOC PMP documentation
PMP3.73 Unedited, original 73 article text
ERRATA.DOC Corrections for article reprints

ASSY.DOC Modem assembly notes
INTERFAC.DOC Information on connections to radios
PMPSRC11.ZIP PMP source archive (Turbo C)
MAKECFG.EXE PMP configuration generator
MAKECFG.PAS Source for MAKECFG.EXE (Turbo Pascal)
PMP10.ZIP Old version 1.0 executables

The unarchiver program, PKUNZIP.EXE is included on the disk
for your convenience. Some .doc files may have been added since
this printing_please read everything before heating up the iron.

Frequently Asked Questions

How do I hook up my Hayes 1200 baud modem?

PMP will not work with regular telephone modems (these modems
do not implement the Bell 202 protocol used for 1200 baud VHF
packet). PMP requires a special modem, interfaced to the parallel
port. For details on constructing a modem, see our article in the
August, 1991 issue of 73 Amateur Radio Today.

Can I get a version of PMP for my XYZPDQ computer?

PMP is for IBM PC and compatibles running MS-DOS only!
PMP does not run on any other type of computer, including: Atari,
Amiga, Color Computer, and Macintosh.

How do I get PMP to work with my Etherbender 1000 VHF rig?

Since there are so many different types of radios out there, we
can't provide connection details for all of them. The PMP modem
uses the same radio connections (receive audio, transmit audio,
push-to-talk) as a regular TNC. Look in your owner's manual for
connection details or find someone who has hooked up a similar rig.
The disk file INTERFAC.DOC contains some hints and troubleshoot-
ing techniques. If you are still stuck, send us a note describing your
problem and we'll do what we can to help.

Will PMP work for 300 baud HF packet?

No, PMP only implements 1200 baud packet (for UHF/VHF
bands and parts of 10 meters).
Documentation

All of the PMP program documentation is supplied on the disk in
the file PMP.DOC. Our article, "Poor Man's Packet" in the August,
1991 issue of 73 Amateur Radio Today has detailed information on
building and interfacing a modem.
The PMP modem isn't hard to build and get running, but we
do assume some kit building experience. If you are running into
problems, first ask around locally for someone who can help you.
Please do not send us PMP modems for troubleshooting and
repair_we can't return them.

How to get in touch with us

We are eager to answer your questions and help you get started
with PMP. After all, our motivation for writing PMP was to offer
a cheap and easy way to help others get started in packet.
The best way to get in touch with us is Internet electronic mail.
Andy N8KEI can be reached at payne@crl.dec.com. You can send
and receive Internet e-mail through CompuServe and MCImail_
ask a local guru for help. Finally, there's always the postal service.
Please enclose a SASE with your inquiry. Andy's address is:

Andrew C. Payne, N8KEI
P.O. Box 109
Lincoln, MA 01773

Modem Parts Kits - No longer available!

Due to drop in demand, we can no longer afford to sell modem
kits. If you are still interested in building a PMP modem, we've
compiled a list of sources for the parts:

TCM3105 JDR Microdevices, (800) 538-5000
$9.95/each, no minimum order

Active Electronics, (800) 677-8899, internationa*
*l orders (514) 630-7410
$6.47/each, $25.00 minimum order

4.336 MHz crystal Active Electronics, (800) 677-8899, internationa*
*l orders (514) 630-7410
$0.88/each, $25.00 minimum order

(possibly other suppliers, the frequency is the *
*European colorburst)

PC Boards FAR Circuits
18N640 Field Court
Dundee, IL 60118

Home Station ("Figure 3"): $7.00/each
Laptop ("Figure 2"): $5.00/each

Add $1.50 per four boards for shipping and handl*
*ing

Misc. Parts Digi-Key (800) 344-4539
JDR Microdevices, (800) 538-5000
Radio-Shack
Obtaining the PMP software

If you've got a friend that is interested in PMP, feel free to make a
copy of the software. PMP is freely copyable for NON-COMMERCIAL
AMATEUR RADIO USE ONLY. If you would like to send money,
we suggest a $10 donation. Remember that PMP is not public
domain (Andy retains the copyright) and so may not be sold for

anything beyond reasonable duplication costs.
For the latest version of the PMP software, please send $10 for a disk. Please specify the format: 5.25" DS/DD or 3.5" DS/DD disk.
Also, the latest version of PMP can be found via Internet anonymous FTP on helios.tn.cornell.edu (128.84.241.2) in the directory /pub. If you don't have Internet mail but not FTP, try the FTP mail server: send a mail message with the subject "help" and a single message line "help" to ftpmail@decwrl.dec.com. PMP can also be downloaded from CompuServe, GEnie, or the 73 Magazine BBS at (603) 525-4438.
Sorry, we can't register users for automatic updates. (the current version is 1.1)
We hope you enjoy PMP!
Andy, N8KEI
Kevin, WB2EMS

24. Where 10 MHz SIO for TNC2?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-08 18:58:34 UTC
From: glenne@sr.hp.com
Message-ID: <C9v0pn.FqE@srgenprp.sr.hp.com>
Source record: 51863

Does anyone know of a source for a small number, perhaps 6-10, of 10
MHz SIO (Z80 family) serial comm. chips to use in increasing the speed
of a TNC2 or clone?
A quick look of the <standard places> doesn't reveal anything.
PacComm sells a 10 MHz version of their Tiny2 but has it on 3 month
delivery due to lack of the faster CPU and SIO parts.
I want to upgrade some TNCs for temporary use in a high speed
backbone and need some parts.

Any pointers would be appreciated.

Thanks,

Glenn Elmore n6gn

N6GN @ K3MC
amateur IP: glenn@SantaRosa.ampr.org
Internet: glenne@sr.hp.com

25. Setting up a MFJ-1274

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-09 01:29:02 UTC
From: mm1@hounix.org
Message-ID: <1993Jul09.012902.387@hounix.org>
Source record: 51864

I have a MFJ-1274 and wish to set it up for fowarding and retreiving mail.
I have it running the standard mailbox at present.
I have read the FAQ's and downloaded various articles on packet, but I am
still a little fuzzy about the domain addressing.
Any help will be very much welcomed.

John - WB5DGQ

--
****
* John Donaldson one very Happy MM/1 Owner *
* send mail to: mm1@Hounix.org *
* VAXELF on Delphi *

26. Introduction to DSP

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-12 20:18:20 UTC
From: alanb@sr.hp.com
Message-ID: <CA2J2L.LoE@srgenprp.sr.hp.com>
Source record: 51865

I have seen several requests for a good introduction to Digital Signal Processing. Perhaps the following posting lifted from comp.dsp fills the bill. Disclaimers: I have not seen this book. Also, when the author says the book is "non-mathematical" he is probably speaking from an engineer's point of view. It may be heavier going for the average ham.

From: allredr@mksol.dseg.ti.com (rustin w allred)

YOU'VE GOTTA HAVE THIS BOOK!

"Digital Signal Processing: A Practical Approach", E. C. Ifeachor and B. W. Jervis, Addison-Wesley, 1993.

The world is full of books. Many of them are pretty good. Some of them are great. AND THERE ARE A FEW THAT ARE DOWN-RIGHT EXCITING! "Digital Signal Processing: A Practical Approach" (DSPAPA) is exciting (really).

This book will appeal to a large audience. Putting DSP before mathematics, DSPAPA gets down to business about how to put DSP to work. Used along with more theoretical texts it is a boon to the theoretical DSPers when they need to consider how to put that theory to work.

Newcomers to DSP or those practicing DSP without formal DSP backgrounds will find the book extremely useful as well. This book doesn't "assume the entire existing body of mathematics". Rather, it presents the necessary math and pointers to where to go for more as necessary. You will not get lost in the math--this book was written to help you get the DSP and put it to work.

Students of DSP will benefit by reading this book before studying the more theoretical treatments, or use it to help get a feel for what the theoretical books don't make clear. Professors will want to use this book for introductory courses to insure that their students get some practical knowledge painlessly. Once the intuition is established the student can go deeper into the theory with a better understanding of what it's really all about.

Algorithm implementers will like this book's practical approach. Chapter 12 even gives examples of implementations on DSP chips (TI chips were wisely chosen by the authors for these examples!).

Everyone will be happy to find hard copy of C routines for many DSP tasks. A disk containing all of these routines (source and

PC executable) and code for the DSP chip examples is also available
from the authors (I have not yet received mine but believe it will
be a worthwhile investment).

When you buy this book, here's what you'll get:

Chapter 1:Introduction
Chapter 2:Discrete transforms
Chapter 3:The z-transform and its applications in signal processing
Chapter 4:Correlation and convolution
Chapter 5:A framework for digital filter design
Chapter 6:Finite impulse response (FIR) filter design
Chapter 7:Design of infinite impulse response (IIR) digital filters
Chapter 8:Multirate digital signal processing
Chapter 9:Adaptive digital filters
Chapter 10:Spectrum estimation and analysis
Chapter 11:General- and special-purpose hardware for DSP
Chapter 12:Applications and case studies

This summary is provided as a public service and does not necessarily
reflect the views of TI, Addison-Wesley or the book's authors but is
the sole responsibility of Rusty Allred.

--
|---|
Rusty Allred, PhD	
Texas Instruments	I speak for nobody, including myself.
allredr@lobby.ti.com	

27. QSL cards

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-14 21:43:01 UTC
From: wjturner@iastate.edu
Message-ID: <CA6CBq.7ty@news.iastate.edu>
Source record: 51866

Hello, everyone! I recently have gotten into HF. (OK, it was a few months ago. :-) I am looking for my first QSL cards. Can anyone recommend somewhere to get QSL cards at a good price? I am not looking for anything fancy, maybe like my dad's old cards (30 years ago) with the call on a plane background--black.

Any ideas?

Thanks.

--
Will Turner, N0RDV --
wjturner@iastate.edu | "Are you going to have any professionalism, |
twp77@isuvax.iastate.edu | or am I going to have to beat it into you?" |
TURNERW@vaxld.ameslab.gov --

28. need packet repeater info

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-14 22:36:07 UTC
From: kohlwey@nu.sim.es.com
Message-ID: <2221on$4tp@cnn.sim.es.com>
Source record: 51867

I am getting ready to put a digital repeater on a mountain top
here in Utah. I would like to know what others have done.

Are there any 9600 bps bit regenerator digital repeaters
out there? Any that also support 1200 at the same time?

Do these repeaters ID on there own?

Any on 2 meters?

Does anyone have information on the Xanthus Digital Regenerator
ROM for a TNC-2?

I would like to here from those who have done this.

Thanks

73, N7SFI Randy

kohlwey@nu.sim.es.com or n7sfi@amsat.org

(801) 582-5847 ext 3950 work number

29. Re: QSL cards

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-15 06:26:10 UTC
From: cfm1471@ucs.usl.edu
Message-ID: <1993Jul15.062610.27215@usl.edu>
Source record: 51868

In article <CA6CBq.7ty@news.iastate.edu> wjturner@iastate.edu (William J Turner) writes:
>Hello, everyone! I recently have gotten into HF. (OK, it was a few months
>ago. :-) I am looking for my first QSL cards. Can anyone recommend
>somewhere to get QSL cards at a good price? I am not looking for anything
>fancy, maybe like my dad's old cards (30 years ago) with the call on
>a plane background--black.
>
>Any ideas?
>
>Thanks.
>
>--
>Will Turner, N0RDV --
>wjturner@iastate.edu | "Are you going to have any professionalism, |
>twp77@isuvax.iastate.edu | or am I going to have to beat it into you?" |
>TURNERW@vaxld.ameslab.gov --

Will, sit down with any HamMag and look in the back. There are plenty
of ads in the classified areas, most are free, some want stamps in return
and others want cash. Check em out, they usually send lotsa samples.

Charlie

Charles Morrison KI5XP Internet: ki5xp@ucs.usl.edu
U. of Southwestern La. Internet: cfm1471@ucs.usl.edu
Lafayette, La. 70506 Packet: KI5XP@K5ARH.LA
(318) 988-3821

****** Field Day (2A): W5DDL #2 in 92, #1 in '93 ******

30. Re: need packet repeater info

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-15 06:44:25 UTC
From: dan@aznet.stat.com
Message-ID: <qgsP7B2w165w@aznet.stat.com>
Source record: 51873

kohlwey@nu.sim.es.com (Randy Kohlwey) writes:

>
> Are there any 9600 bps bit regenerator digital repeaters
> out there? Any that also support 1200 at the same time?
>

By the end of the summer the State of Arizona will have a total of 3 9600 bps bit regen sites. 1 was in service previously for various traffic on the 440 band and users had access....The 2 currently being built, 1 in my garage, another at my friend's, will be on the 420 Mhz Band for link purposes...tying in multiple sites without multiple radios... We have had excellent luck... We have tried 9600/1200 on a VHF simplex channel, it was ok, DCD always triggered on the 9600, but failed often on 1200 baud TNC's, such as TNC-2 Clones Our study found that the 1200 baud modems are succeptable to cancelling out 4800-19,200 due to its audio characteristics sounding simply like open squelch.

> Do these repeaters ID on there own?
>
They ID with a NETROM CHIP....In other words, every ten minutes in Ax.25, perfectly legal, no morse code..

> Any on 2 meters?
>
We have a bunch of simplex links, only 1 test has been done with high-band repeaters and 9600, good results...

> Does anyone have information on the Xanthus Digital Regenerator
> ROM for a TNC-2?
>
I sure don't but would like to also know how to contact the above company...

> I would like to here from those who have done this.
>
> Thanks
>
> 73, N7SFI Randy

Please feel free to E-mail me directly for various problems etc. that I have run into in these projects...

73 de Dan N7MRP
Arizona Packet Coordinator

Internet: dan@aznet.stat.com
Ax.25: n7mrp@n7mrp.az.usa.na

Voice: (602) 956-2566

31. PK-88 at 9600 baud

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-15 08:37:26 UTC
From: ae674@yfn.ysu.edu
Message-ID: <223506$hl0@news.ysu.edu>
Source record: 51870

A friend of mine has a PK-88 and we would like to know what
experience people have had at running it with 9600 baud modems?
He read some stuff from the manual to me over the phone which
seemed to indicate the the TNC was capable of 19.2k baud, at
least between the TNC and the computer. Any comments would be
appreciated.

Thanks, Reid Savage N9SYW
--

32. Where to buy Tekk radios?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-15 08:39:51 UTC
From: ae674@yfn.ysu.edu
Message-ID: <22354n$hl1@news.ysu.edu>
Source record: 51869

Hi Everyone,

Were hoping to upgrade the TCP/IP activity in my area (Madison,WI)
from 2400 baud on 2 meters to 9600+ baud on 70 cm.I would like
to know where to buy those 2 watt tekk data radios so people can
easily get on the air. I would also like to know if anybody has
successfully interfaced a 9600 baud modem with a soft TNC program
on a PC or Mac? Any other suggestions about other plug and play
9600 baud systems would be welcome.

Thanks, Reid Savage

--

33. Guide to the Personal Radio Newsgroups

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-15 13:32:09 UTC
From: pschleck@unomaha.edu
Message-ID: <radio/personal-intro-1-742743120@unomaha.edu>
Source record: 51871
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.packet,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.info,rec.answers,news.answers

```
Posted-By: auto-faq 2.4
Archive-name: radio/personal-intro
Revision: 1.4 06/30/93 12:04:14
Changes: new rec.radio.amateur.* newsgroups, cs.utexas.edu gateway

(Note: The following is reprinted with the permission of the author.
Due to the recent reorganization, it is also on a temporarily-
accelerated posting schedule as follows:

July weekly
August bi-weekly
September back to monthly)

This message describes the rec.radio.amateur.*, rec.radio.cb, rec.radio.info,
and rec.radio.swap newsgroups. It is intended to serve as a guide for the new
reader on what to find where. Questions and comments may be directed to the
author, Jay Maynard, K5ZC, by Internet electronic mail at
jmaynard@oac.hsc.uth.tmc.edu. This message was last changed on 30 June 1993 to
add the groups created during the latest reorganization vote and the
description of the cs.utexas.edu gateway.

History
=======

Way back when, before there was a Usenet, the Internet hosted a mailing list
for hams, called (appropriately enough) INFO-HAMS. Ham radio discussions
were held on the mailing list, and sent to the mailboxes of those who had
signed up for it. When the Usenet software was created, and net news as we
now know it was developed, a newsgroup was created for hams: net.ham-radio.
The mailing list and the newsgroup were gatewayed together, eventually.

As the net grew, and as packet radio came into vogue, packet discussion began
to dominate other topics in the group and on the list. This resulted in the
logical solution: a group was created to hold the packet discussion, and
another corresponding mailing list was created as well: net.ham-radio.packet
and PACKET-RADIO, respectively.

These two groups served for several years, and went through Usenet's Great
Renaming essentially unchanged, moving from net.ham-radio[.packet] to
rec.ham-radio[.packet]. Readership and volume grew with the rest of the
network.

The INFO-HAMS mailing list was originally run from a US Army computer at
White Sands Missile Range, SIMTEL20. There were few problems with this
```

arrangement, but one was that the system was not supposed to be used for commercial purposes. Since one of hams' favorite pastimes is swapping gear, it was natural for hams to post messages about equipment for sale to INFO-HAMS/rec.ham-radio. This ran afoul of SIMTEL20's no-commercial-use restriction, and after some argument, a group was created specifically for messages like that: rec.ham-radio.swap. This group wasn't gatewayed to a mailing list, thus avoiding problems.

While all this was happening, other folks wanted to discuss other aspects of the world of radio than the personal communications services. Those folks created the rec.radio.shortwave and rec.radio.noncomm newsgroups, and established the precedent of the rec.radio.* hierarchy, which in turn reflected Usenet's overall trend toward a hierarchical name structure.

The debate between proponents of a no-code ham radio license and its opponents grew fierce and voluminous in late 1989 and 1990. Eventually, both sides grew weary of the debate, and those who had not been involved even more so. A proposal for a newsgroup dedicated to licensing issues failed. A later proposal was made for a group that would cover the many recurring legal issues discussions. During discussion of the latter proposal, it became clear that it would be desirable to fit the ham radio groups under the rec.radio.* hierarchy. A full-blown reorganization was passed by Usenet voters in January 1991, leading to the overall structure we now use.

After the reorganization, more and more regular information postings began to appear, and were spread out across the various groups in rec.radio.*. Taking the successful example of the news.answers group, where informational postings from across the net are sent, the group rec.radio.info was created in December, 1992, with Mark Salyzyn, VE6MGS, initially serving as moderator.

In January, 1993, many users started complaining about the volume in rec.radio.amateur.misc. This led to a discussion about a second reorganization, which sparked the creation of a mailing list by Ian Kluft, KD6EUI. This list, which was eventually joined by many of the most prolific posters to the ham radio groups, came up with a proposal to add 11 groups to the rec.radio.amateur hierarchy in April 1993. The subsequent vote, held in May and early June, approved the creation of five groups: rec.radio.amateur.digital.misc (to replace .packet), .equipment, .homebrew, .antenna, and .space.

The Current Groups

I can hear you asking, "OK, so this is all neat history, but what does it have to do with me now?" The answer is that the history of each group has a direct bearing on what the group is used for, and what's considered appropriate where.

The easy one is rec.radio.amateur.misc. It is what rec.ham-radio was renamed to during the reorganization. Any message that's not more appropriate in one of the other groups belongs here, from contesting to DX to ragchewing on VHF to information on becoming a ham.

The group rec.radio.amateur.digital.misc is for discussions related to (surprise!) digital amateur radio. This doesn't have to be the common two-meter AX.25 variety of packet radio, either; some of the most knowledgeable folks in radio digital communications can be found here, and anything in the general area is welcome. The name was changed to emphasize this, and to encourage discussion not only of other text-based digital modes, such as AMTOR, RTTY, and Clover, but things like digital voice and video as well. The former group, rec.radio.amateur.packet, has not been removed as of this writing, but it is obsolete, and you should use .digital.misc instead. The group has the .misc as part of the name to allow further specialization if the users wish it, such as .digital.tcp-ip.

The swap group is now rec.radio.swap. This recognizes a fact that became evident shortly after the original group was formed: Hams don't just swap ham radio gear, and other folks besides hams swap ham equipment. If you have radio equipment, or test gear, or computer stuff that hams would be interested in, here's the place. Equipment wanted postings belong here too. Discussions about the equipment generally don't; if you wish to discuss a particular posting with the buyer, email is a much better way to do it, and the other groups, especially .equipment and .homebrew, are the place for public discussions. There is now a regular posting with information on how to go about buying and selling items in rec.radio.swap; please refer to it before you post there.

The first reorganization added two groups to the list, one of which is rec.radio.amateur.policy. This group was created as a place for all the discussions that seem to drag on interminably about the many rules, regulations, legalities, and policies that surround amateur radio, both existing and proposed. The neverending no-code debate goes here, as does the New Jersey scanner law, the legality of ordering a pizza on the autopatch, what a bunch of rotten no-goodniks the local frequency coordinating body is, and so on.

The other added group is rec.radio.cb. This is the place for all discussion about the Citizens' Band radio service. Such discussions have been very inflammatory in rec.ham-radio in the past; please do not cross-post to both rec.radio.cb and rec.radio.amateur.* unless the topic is genuinely of interest to both hams and CBers - and very few topics are.

The rec.radio.info group is just what its name implies: it's the place where informational messages from across rec.radio.* may be found, regardless of where else they're posted. As of this writing, information posted to the group includes Cary Oler's daily solar progagation bulletins, ARRL bulletins, the Frequently Asked Questions files for the various groups, and radio modification instructions. This group is moderated, so you cannot post to it directly; if you try, even if your message is crossposted to one of the other groups, your message will be mailed to the moderator, who is currently Mark Salyzyn, VE6MGS. The email address for submissions to the group is rec-radio-info@ve6mgs.ampr.ab.ca. Inquires and other administrivia should be directed to rec-radio-request@ve6mgs.ampr.ab.ca. For more information about rec.radio.info, consult the introduction and posting guidelines that are regularly posted to that newsgroup.

The groups rec.radio.amateur.antenna, .equipment, .homebrew, and .space are for more specialized areas of ham radio: discussions about antennas, commercially-made equipment, homebrewing, and amateur radio space operations. The .equipment group is not the place for buying or selling equipment; that's what rec.radio.swap is for. Similarly, the .space group is specifically about amateur radio in space, such as the OSCAR program and SAREX, the Shuttle Amateur Radio EXperiment; other groups cover other aspects of satellites and space. Homebrewing isn't about making your own alcoholic beverages at home (that's rec.crafts.brewing), but rather construction of radio and electronic equipment by the amateur experimenter.

The rec.radio.amateur.misc, .packet, and .policy groups, and the rec.radio.info group, are available by Internet electronic mail in digest format; send a mail message containing "help" on a line by itself to listserv@ucsd.edu for instructions on how to use the mail server. The rec.radio.swap group is not available for reading by electronic mail. At this writing, the most recently added groups are also not available for reading by electronic mail, although that may change.

All of the groups can be posted to by electronic mail, though, by using a gateway at the University of Texas at Austin. To post a message this way, change the name of the group you wish to post to by replacing all of the '.'s with '-'s - for example, rec.radio.swap becomes rec-radio-swap - and send to that name@cs.utexas.edu (rec-radio-swap@cs.utexas.edu, for example). You may crosspost by including multiple addresses as Cc: entries (but see below). This gateway's continued availability is at the pleasure of the admins at UT-Austin, and is subject to going away at any time - and especially if forgeries and other net.abuses become a problem. You have been warned.

A Few Words on Crossposting

Please do not crosspost messages to two or more groups unless there is genuine interest in both groups in the topic being discussed, and when you do, please include a header line of the form "Followup-To: group.name" in your article's headers (before the first blank line). This will cause followups to your article to go to the group listed in the Followup-To: line. If you wish to have replies to go to you by email, rather than be posted, use the word "poster" instead of the name of a group. Such a line appears in the headers of this article.

One of the few examples of productive cross-posting is with the rec.radio.info newsgroup. To provide a filtered presentation of information articles, while still maintaining visibility in their home newsgroups, the moderator strongly encourages cross-posting. All information articles should be submitted to the rec.radio.info moderator so that he may simultaneously cross-post your information to the appropriate newsgroups. Most newsreaders will only present the article once, and network bandwidth is conserved since only one article is propagated. If you make regular informational postings, and have made arrangements with the moderator to post directly to the group, please cross-post as appropriate.

--
Jay Maynard, EMT-P, K5ZC, PP-ASEL | Never ascribe to malice that which can
jmaynard@oac.hsc.uth.tmc.edu | adequately be explained by stupidity.
"If my car ran OS/2, it'd be there by now" -- bumper sticker
GCS d++ p+ c++ l+ m+/- s/++ g++ w++ t+ r

--
73, Paul W. Schleck, KD3FU

pschleck@unomaha.edu

Celebrating 60 years of the Univ. of Maryland ARA - W3EAX (1933-1993)

34. Re: QSL cards

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-15 15:23:47 UTC
From: wjturner@IASTATE.EDU
Message-ID: <1993Jul15.102347@IASTATE.EDU>
Source record: 51872

Thank you to everyone who responded to my earlier post. I have looked in QST (actually did it first for once), and with the advise from helpful hams I have sent for samples from some places that they recommended, as well as look into the other ideas.

Thanks a lot!!

--
Will Turner, N0RDV ----------
wjturner@iastate.edu | "Are you going to have any professionalism, |
twp77@isuvax.iastate.edu | or am I going to have to beat it into you?" |
TURNERW@vaxld.ameslab.gov ----------

35. PK-232 upgrade

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-16 09:54:03 UTC
From: Tom-Rune.Lauknes@itek.norut.no
Message-ID: <Tom-Rune.Lauknes-160793115839@192.135.201.52>
Source record: 51874

What is the latest version of the eprom/software for the PK232 TNC??

73 de Tom

-Tom Rune Lauknes LA1BJA "Why are the whales so special?"
-
-NORUT IT A.S
-
-e-mail:Tom-Rune.Lauknes@itek.norut.no
-
---

36. Re: commercial use of packet

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-16 12:40:13 UTC
From: merlin@lk-hp-17.hut.fi
Message-ID: <2267jd$jeb@nntp.hut.fi>
Source record: 51875
Cross-posted to: rec.radio.amateur.packet,rec.radio.amateur.digital.misc

In newsgroup rec.radio.amateur.packet dbushong@wang.com (Dave Bushong) writes:

>I helped set up a VHF/UHF/HF network for the Philippine Department of
>Health a few years back. There are TNCs available that have encryption
>options for non-amateur use, also. I think AEA makes them.

This is very interesting. Is there any more info available, anyone?

Can someone tell me the contact data for finding out more about these AEA TNC's, please?

Followup-To: rec.radio.amateur.packet

Jouni
-------- Beam becomes my dream, my dream is on the screen. (-Blondie) -------
merlin@otax.tky.hut.fi merlin@snakemail.hut.fi merlin@alpha.hut.fi
merlin@vipunen.hut.fi s34030b@kaira.hut.fi
--------------- /S=merlin/OU=vipunen/O=hut/ADMD=fumail/C=fi/ ----------------

37. 6m MBC: Some Thoughts

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-16 16:53:01 UTC
From: paulf@csli.stanford.edu
Message-ID: <1993Jul16.165301.11498@Csli.Stanford.EDU>
Source record: 51876

As part of a thought experiment, I decided to pencil out a meteor burst communications system for six meters. The assumptions are:

1. Rig: 10w 6m SSB rig driving a 150w brick amp.
2. Antennas: 8.15 dbi 2 el collinear by Diamond, both ends.
3. Distance: About 1000 km, or 600 miles.
4. Noise: Residential noise levels as limiting noise, about 15db above galactic noise, and about 30db above thermal noise.
5. Modem: Coherent BPSK, 2400 baud, 2400 Hz, threshold of 4db for 10E-2 BER.
6. DSP: Rate 3/4 Reed - Solomon Code.

Using the above assumptions, I get about 200KB per day of throughput, on the average. The 90% CI would be about 40-1000KB per day. The duty cycle is about 50% for the receive end, so don't count on portability unless you have a generator.

My question is: Would this be useful? The system should work out to about 1500 km, albeit somewhat degraded. It might have some use as part of an autoforwarding mail network, and of course, at 50 MHz, is useable by no-code techs.

--
-=Paul Flaherty, N9FZX | "The National Anthem has become The Whine."
->paulf@Stanford.EDU | -- Charles Sykes, _A Nation of Victims_

38. IC 275A and AEA DSP2232

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-16 17:23:17 UTC
From: seeler@UPEI.CA
Message-ID: <seeler.23.742843396@UPEI.CA>
Source record: 51878

I am interested in talking to those who have used the IC 275A for 9.6 Kb packet. In particular - I am interested in the conections to either of the ports on the rear of the IC 275 from the AEA 2232 or the PK232.

Thank you for considering this request. - Please reply to my Internet address below.

David, VY2DCS
Internet: Seeler@UPEI.CA

39. SNMP and KA9Q NOS?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-16 17:56:08 UTC
From: levin@bbn.com
Message-ID: <m4dqtoINNfs8@news.bbn.com>
Source record: 51877
Cross-posted to: rec.radio.amateur.packet,rec.radio.amateur.digital.misc

I'd like to know if anyone has augmented the KA9Q Internet package by
adding SNMP, the Simple Network Managagement Protocol?

(E-mail responses preferred, I will summarize to the net.)

Thanks / JBL
=
Internet: levin@bbn.com | USPS: BBN Systems and Technologies Division
UUCP: levin@bbn.com | Mail Stop 6/5A
Telco: (617)873-3463 | 10 Moulton Street
KD1ON (@KB4N.NH.USA.NA) | Cambridge, MA 02138

40. Poor mans packet for Mac???

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-16 22:40:19 UTC
From: marcbg@feenix.metronet.com
Message-ID: <CAA4B7.EEy@feenix.metronet.com>
Source record: 51879

```
Newsgroups: rec.radio.amateur.misc,rec.radio.info
Subject: ARRL DX BUL 036
Summary:
Followup-To:
Distribution: usa
Organization: Texas Metronet, Internet for the Individual 214-705-2917 (info)
Keywords:

Newsgroups: rec.radio.amateur.misc
Subject: ARRL DX BUL 036
Summary:
Expires:
Sender:
Followup-To:
Distribution: usa
Organization: Tx Metronet Communications Services, Dallas Tx
Keywords:

Newsgroups: alt.radio.scanner
Subject: Re: Boston
Summary:
Expires:
References: <CA2sxu.FHs@cmcl2.nyu.edu> <1993Jul14.012328.29047@jac.nuo.dec.com>
Sender:
Followup-To:
Distribution:
Organization: Tx Metronet Communications Services, Dallas Tx
Keywords:

In article <1993Jul14.012328.29047@jac.nuo.dec.com> mcneill@salem.enet.dec.com (Kevin
McNeill) writes:
>
>In article <CA2sxu.FHs@cmcl2.nyu.edu>, jcksnste@ACF1.NYU.EDU writes...
>>Can someone post the Boston MRS freqs and 10-codes? I saw them in a copy
>
>
> Steve,
>
> Metro Radio System.. Boston
>
> 462.725 R MRS Primary PL:167.9
> 462.725 On-scene, no repeater PL:167.9
> 462.6625 Car -to- Car PL:167.9
>
> More info:
```

>
> contact... Julian Olansky
> Dispatcher # 8
> PO Box 26
> Newton Highlands, MA. 02161
>
> I have the 10-codes but not in electronic copy. No time to type
> it in tonight.
>
>
>
> Regards,
>
>
> Kevin
>
> ++
> + Kevin J. McNeill | internet: +
> + Digital Equipment Corporation *| mcneill@salem.enet.dec.com +
> + 9 Northeastern Blvd. | +
> + Salem, NH. USA 03079 | TEL: 603 894-2555 +
> ++
> + *DISCLAIMER..... +
> + My comments are my own and may not reflect those of Digital +
> + Equipment Corporation. +
> ++

Newsgroups: rec.radio.amateur.misc
Subject: Re: Announcement - ARRL Automated Electronic Mail Server (info@arrl.org)
Summary:
Expires:
References: <rec-radio-info742612311@ve6mgs.ampr.ab.ca>
Sender:
Followup-To:
Distribution:
Organization: Tx Metronet Communications Services, Dallas Tx
Keywords:

In article <rec-radio-info742612311@ve6mgs.ampr.ab.ca> ehare@arrl.org (Ed Hare - KA1CV)
writes:
>The American Radio Relay League (ARRL) has a useful service -- the ARRL
>Automated Electronic Mail Server. This server lets you access many of our
>information files, containing information about various facets of
>Amateur Radio. You can retrieve any or all of these files by sending
>an email message containing valid commands to info@arrl.org here
>at ARRL HQ. Each file you request is then mailed to you automatically,
>usually within a few hours.
>
>To use it, mail messages to:
>
> info@arrl.org

>
>The subject line is ignored. Each line of the message should contain a
>command as shown below. You may place as many commands in a message as
>you want. Each file you request will be sent to you in a separate message.
>Only ASCII text files are supported at present.
>
>Valid INFO commands:
>
>help Sends this help file
>index Sends an index of the files available from INFO
>send FILENAME Sends "FILENAME" example: send ARRL-EMAIL-ADR
>quit Terminates the transaction (use this if you have
> a signature or other text at the end of the message.)
>reply <address> Sends the response to the specified address. Put this
> at the BEGINNING of your message if your From: address
> is not a valid Internet address.
>
>Note: your message will *not* be read by a human! Do not include any
>requests or questions except by way of the above commands. Retrieve
>the "ARRL-EMAIL-ADR" file for a list of addresses of ARRL HQ staff.
>
>Sample of files available from INFO: (There are lots more!)
>
>FILENAME SIZE DATE DESCRIPTION
>---------------- ---- ------ --------------------
>#Note - If you are not yet an Amateur Radio operator retrieve the
>#file PROSPECT (send PROSPECT) for information on how to easily get
>#started in this fun hobby.
>
>PROSPECT 2k 930514 How to get your Amateur Radio license
>EXAM-SCHEDULE 52k 930629 Current exam schedule info - updated bi-weekly
>EXAM-INFO 9k 921020 Examinations - what to bring - requirements
>ARRL-EMAIL-ADR 6k 930119 List of HQ Email addresses
>ARRL-CATALOG 39k 930709 Catalog of ARRL Publications - commercial content
>ARRL-JOIN 2k 930621 How become an ARRL member
>ARRL-SERVICES 5k 930621 A condensed list of ARRL membership services
>ARRL-TOUR 28k 930621 An electronic tour of ARRL Headquarters
>VISIT-HQ 5k 930310 Visiting ARRL HQ - diretions and tour information
>BANDS-HF 7k 921203 Breakdown of users of HF spectrum
>Q-SIGNALS 1k 921203 ARRL list of Amateur Radio Q-signals
>W1AW-SCHEDULE 2k 930120 W1AW schedule of transmissions and operation
>BEST-RIG-1 12k 930227 Which rig is best? Part 1 - QST Lab Notes
>BEST-RIG-2 22k 930227 Which rig is best? Part 2 - QST Lab Notes
>EMI-GEN 37k 930120 How to solve an EMI/RFI problem - QST Lab Notes
>EMI-SOURCE 13k 930607 Where to buy filters - EMI-proof telephones etc.
>ADDRESSES 16k 930318 Lots and lots of ham/electonic company addresses
>KITS 6k 930430 List of companies that sell kits
>BBS 12k 930601 List of ham-radio land-line bulletin boards
>FAQ-1 25k 930707 Introduction to the FAQ and Amateur Radio
>FAQ-2 45k 930707 Amateur Radio Orgs, Services and Info Sources

>FAQ-3 32k 930707 Amateur Radio Advanced and Technical Questions
>
>Enjoy this ARRL service. Please direct comments or suggestions (or flames)
>#to ehare@arrl.org. 73 from ARRL HQ. Ed Hare - KA1CV.
>
>
>-----
>Ed Hare, KA1CV ehare@arrl.org
>American Radio Relay League
>225 Main St.
>Newington, CT 06111 "The goal of every engineer is to
>(203) 666-1541 - voice retire without getting blamed for a
>ARRL Laboratory Supervisor major catastrophe." -- Scott Adams
>RFI, xmtr and rcvr testing and Dilbert
>-----
>--
> - Postings to rec.radio.info: rec-radio-info@ve6mgs.ampr.ab.ca
> - rec.radio.info administrivia: rec-radio-request@ve6mgs.ampr.ab.ca

Newsgroups: rec.radio.amateur.misc
Subject: Re: test
Summary:
Expires:
References: <$arla001@ampr.org>
Sender:
Followup-To:
Distribution: usa
Organization: Tx Metronet Communications Services, Dallas Tx
Keywords:

In article <$arla001@ampr.org> marcbg@feenix.metronet.com (Marc Grant) writes:
>This is a test message, please disregard
>
>
>--
>Marc B. Grant, N5MEI | marcbg@feenix.metronet.com | 214/231-3998 (voice)
>P.O Box 850472 | marcbg@esy.com | 214/231-0025 (fax)
>Richardson, TX 75085 | |

Newsgroups: rec.radio.amateur.digital.misc
Subject: Poor Mans packet for Mac???
Summary:
Expires:
Sender:
Followup-To:
Distribution: world
Organization: Tx Metronet Communications Services, Dallas Tx
Keywords:

--
Marc B. Grant, N5MEI | marcbg@feenix.metronet.com | 214/231-3998 (voice)

P.O Box 850472 | marcbg@esy.com | 214/231-0025 (fax)
Richardson, TX 75085 | |

41. Re: Where to buy Tekk radios?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-18 03:19:10 UTC
From: arp0150@ritvax.isc.rit.edu
Message-ID: <1993Jul18.031910.9689@ultb.isc.rit.edu>
Source record: 51880

In article <22354n$hl1@news.ysu.edu>, ae674@yfn.ysu.edu (Reid Savage) writes:
>
>Hi Everyone,
>
>Were hoping to upgrade the TCP/IP activity in my area (Madison,WI)
>from 2400 baud on 2 meters to 9600+ baud on 70 cm.I would like
>to know where to buy those 2 watt tekk data radios so people can
>easily get on the air. I would also like to know if anybody has
>successfully interfaced a 9600 baud modem with a soft TNC program
>on a PC or Mac? Any other suggestions about other plug and play
>9600 baud systems would be welcome.
>
>Thanks, Reid Savage
>
>
>
>--

hi... i am not a ham yet.... but i will be soon..you talked about a software
tnc program for the mac.... can you tell what programs to look at and where to
find them?? is there any internet ftp sights???

thanks
alex....73

42. Re: What do TCP/IP packets look like?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-21 13:20:29 UTC
From: n4hy@harder.ccr-p.ida.org
Message-ID: <N4HY.93Jul21132029@harder.ccr-p.ida.org>
Source record: 51882

They could be. They could also be NET/ROM, THE-NET, or ROSE network
supervisory packets. Turn on the parameter in your DRSI that forces it
to tell you what the Protocol Identification Byte (PID) is. Maybe that
will reveal the answer.

Bob
--

Robert W. McGwier | n4hy@ccr-p.ida.org
Center for Communications Research | Interests: amateur radio, astronomy,golf
Princeton, N.J. 08520 | Asst Scoutmaster Troop 5700, Hightstown

43. What do TCP/IP packets look like?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-21 14:34:57 UTC
From: dbraun@ilx049.intel.com
Message-ID: <22jk6h$2rjt@ilx018.intel.com>
Source record: 51881

I have been monitoring a busy packet freq with a DRSI DPK2,
with MCOM on. It seems that most of the packets are not information
packets, but something else. Also, some of these are rather long, longer
than they would have to be for simple acknowledgements. Could
these really be TCP/IP packets? I believe ka9q TCP/IP
imbeds its packets within the HDLC(?)/AX25 prococol. But
how will a TNC in non-kiss mode react when it hears TCP/IP
packets?

Also, what happens when one netrom node talks to another netrom node?
Are netrom's higher level protocols implemented as ASCII information
in a vanilla AX25 packet, or what? Same basic question as for TCP/IP.

If I could get to a store that carried English-language
Ham radio books without having to visit a different continent,
I would have found the answer by now...

--
Doug Braun (N1OWU/4X)

Email: dbraun@iil.intel.com
Intel Mail: IDC1-41
iNet: 8-435-5069 Long Distance: 011-972-4-655069
Fax: 8-435-5999 Long Distance: 011-972-4-655999
Snail Mail: US: Other:
PO Box 311 Intel Israel, Ltd.
Mendham, NJ 07945 IDC1-41
Matam Scientific Center
Haifa, Israel 31015

"There is no human problem which could not be solved if
people would simply do as I advise." -- Gore Vidal

44. Two-way communication with moving vehicle(s)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-21 20:36:14 UTC
From: bill@office.ab.umd.edu
Message-ID: <22k9bu$a8p@umd5.umd.edu>
Source record: 51883
Cross-posted to: sci.med.telemedicine,sci.med.physics,sci.med,rec.radio.amateur.digital.misc

I am investigating methods of 2-way (digital!) communication between moving vehicles (ambulances and helicopters) and a "central" site for an upcoming project. Has anybody tackled this problem before? Can anybody point me at some papers/articles/books on the subject? Anectodal, statistical, and/or personal opinions about packet radio, cellular phones, satellite links, microwave, or any other method for doing this will be GREATLY appreciated.

Please reply via email if possible as I don't always follow this group.

Thanks!

-Bill
--

+-------------------------------------+-------------------------------------+
William P. Bame	Ground: William P. Bame
internet: bill@office.ab.umd.edu	UMMS/Shock Trauma
bbame@achi1.ab.umd.edu	22 South Greene Street
AT&T : [Work] (410) 328-3062	Baltimore, MD 21201
CIS : 71620,425	Room: T1R55
+-------------------------------------+-------------------------------------+

45. Re: 6m MBC: Some Thoughts

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-22 09:04:06 UTC
From: gary@ke4zv.uucp
Message-ID: <1993Jul22.090406.5484@ke4zv.uucp>
Source record: 51884

In article <1993Jul16.165301.11498@Csli.Stanford.EDU> paulf@csli.stanford.edu (Paul Flaherty) writes:
>As part of a thought experiment, I decided to pencil out a meteor burst
>communications system for six meters. The assumptions are:
>
>1. Rig: 10w 6m SSB rig driving a 150w brick amp.
>2. Antennas: 8.15 dbi 2 el collinear by Diamond, both ends.
>3. Distance: About 1000 km, or 600 miles.
>4. Noise: Residential noise levels as limiting noise, about 15db above
> galactic noise, and about 30db above thermal noise.
>5. Modem: Coherent BPSK, 2400 baud, 2400 Hz, threshold of 4db for 10E-2 BER.
>6. DSP: Rate 3/4 Reed - Solomon Code.
>
>Using the above assumptions, I get about 200KB per day of throughput, on the
>average. The 90% CI would be about 40-1000KB per day. The duty cycle is
>about 50% for the receive end, so don't count on portability unless you
>have a generator.
>
>My question is: Would this be useful? The system should work out to about
>1500 km, albeit somewhat degraded. It might have some use as part of an
>autoforwarding mail network, and of course, at 50 MHz, is useable by no-code
>techs.

Of course it would be useful. The government has been using 100 watt stations with 3 el beams to report snowpack depths in remote locations using this method since the 1970s. Ralph Wallio et al conducted some AX25 packet experiments with this a couple of years ago. It wasn't very successful as I recall. AX25 is not well suited to meteor burst communications.

There is a near continuous stream of micrometeors striking the Earth, but the ionization trails don't last long enough for even the shortest packet to get through, AMTOR might work. Bigger micrometeors are also available with trails lasting several seconds, but they are less common, a few hundred an hour in the right orientation. The protocol needs to either use very short data frames, or have a mechanism for probing for the existance of one of the larger trails. The government systems use the latter approach.

I suggested using a separate receiver to monitor for the presence of a TV or FM carrier from the destination as a way of continously probing for the good trails. Channel 2 is ideal. Note that for the good trails the propagation is as good as solid E skip, so extensive error correction is unnecessary overhead.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

46. Re: What do TCP/IP packets look like?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-22 10:17:48 UTC
From: dbraun@ilx049.intel.com
Message-ID: <22lpgc$1cif@ilx018.intel.com>
Source record: 51885

In article <N4HY.93Jul21132029@harder.ccr-p.ida.org>, n4hy@harder.ccr-p.ida.org (Bob McGwier) writes:
|>
|> They could be. They could also be NET/ROM, THE-NET, or ROSE network
|> supervisory packets. Turn on the parameter in your DRSI that forces it
|> to tell you what the Protocol Identification Byte (PID) is. Maybe that
|> will reveal the answer.

Well, I tried this (TRACE ON). Normal packets have a PID of $F0.
The "funny" packets have a PID of $CF. Also, the source and destination
call signs are retpeated in the data area, right after the PID.

Do these clues ring any bells?

--
Doug Braun (N1OWU)

Email: dbraun@iil.intel.com
Intel Mail: IDC1-41
iNet: 8-435-5069 Long Distance: 011-972-4-655069
Fax: 8-435-5999 Long Distance: 011-972-4-655999
Snail Mail: US: Other:
PO Box 311 Intel Israel, Ltd.
Mendham, NJ 07945 IDC1-41
Matam Scientific Center
Haifa, Israel 31015

"There is no human problem which could not be solved if
people would simply do as I advise." -- Gore Vidal

47. rec.radio.amateur.digital.misc Frequently Asked Questions

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-22 16:25:37 UTC
From: steve@wattres.SJ.CA.US
Message-ID: <radio/packet-faq-1-743358329@wattres.SJ.CA.US>
Source record: 51886
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.packet,rec.radio.info,rec.answers,news.answers

```
Posted-By: auto-faq 2.4
Archive-name: radio/packet-faq

Frequently Asked Questions for Amateur Packet Radio

Version 1.16 - Last modified 7/22/93

This document is for unlimited distribution.

Please send corrections and additions to:
packet-faq@wattres.sj.ca.us
Which will expand to a list of people who are familiar with most packet
issues. I hope. ;-)

**********************************************************
**********************************************************
Warning!
rec.radio.amateur.packet WILL BE DELETED on 21 September, 1993. PLEASE
make sure that you are sending your traffic to rec.radio.amateur.digital.misc
by that date! Thanks!
**********************************************************
**********************************************************
N N :
NN N oooo ttttt eeeeee :::
N N N o o t e :
N N N o o t eeeee
N N N o o t e :
N NN o o t e :::
N N oooo t eeeeee :

It's pledge month(s?) for the rec.radio.amateur.digital.misc FAQ. With the
creation of this new newsgroup, I will be needing some input to add coverage
for the other digital modes, i.e. RTTY, AMTOR, PacTOR, CLOVER, digital voice,
and so forth. If you have information on any of these areas that you think
would be helpful to other hams, please send it to
digital-faq@Wattres.SJ.CA.US.

Thanks, and back to your regularly scheduled program.
**********************************************************

The Packet Radio FAQ list will be posted on a monthly basis to
rec.radio.amateur.packet and rec.radio.amateur.digital.misc. The current
version of this document is available via anonymous FTP at ftp.cs.buffalo.edu.

Many FAQ's, including this one, are available on the archive site
rtfm.mit.edu in the directory pub/usenet/news.answers. The name under
```

which a FAQ is archived appears in the Archive-Name: line at the top of the article. This FAQ is archived as radio/packet-faq.

There is also a mail server on rtfm.mit.edu, which can be addressed as mail-server@rtfm.mit.edu. For details on how to operate this server, send a message to that address with the word "help" in the BODY of the message.

Table of contents:

1 Basic Packet Radio Information
1.1 What is packet radio?
1.2 What is amateur radio?
1.3 What can I do on packet radio?
1.4 Why packet over other digital modes?
1.5 What elements make up a packet station?
TNC (Terminal Node Controller)
Computer or Terminal
A radio
1.6 What do you mean we can all use the same channel?
1.7 What is AX.25 ?
1.8 Definitions: Commonly used terms in Amateur Packet Radio
1.9 Do's and Don'ts : Rules and Regulations

2 Computing Network Resources for Amateur Packet radio
2.1 What Newsgroups/mailing lists are available?
2.2 What anonymous FTP sites and mail servers are available?
2.3 How do I contact the ARRL through email?
2.4 Are there any gateways for mail or news
2.4.1 The W2XO Internet mail <-> packet mail gateway
2.4.2 The N0ARY Internet mail <-> full packet BBS gateway
2.4.3 LAN Gateways (Packet wormholes via Internet)

3 Networking and special packet protocols
3.1 Are there any other protocols in use other than AX.25?
3.2 What is TCP/IP?
3.3 Networking Schemes
What are some of those other networking schemes?
Digipeaters
KA-Nodes
NET/ROM
ROSE
3.4 BBS message transfer

1 Basic Packet Radio Information

1.1 What is packet radio?

Packet radio is digital communications via amateur radio. Packet radio takes any digital data stream and sends that via radio to another amateur radio station. Packet radio is so named because it sends the data in small bursts, or packets.

1.2 What is amateur radio?

Amateur Radio (sometimes called Ham Radio) is individuals using specified radio frequencies for personal enjoyment, experimentation, and the continuation of the radio art. Amateur radio operators must be licensed by their government. In the United States, the Federal Communications Commission issues amateur radio licenses. Normally, a test on operating practices, radio theory, and in some cases morse code proficiency test is administered. Amateur radio is not to be used for commercial purposes. Also, amateur radio operators are restricted from using profanity and using amateur radio for illegal purposes.

For more information on Amateur Radio in general, see the monthly frequently asked questions posting in rec.radio.amateur.misc. A copy of that FAQ is also available from ftp.cs.buffalo.edu.

1.3 What can I do on packet radio?

Keyboard-to-Keyboard contacts:

Like other digital communications modes, packet radio can be used to talk to other amateurs. For those who cannot use HF frequencies, two amateurs can talk to each other from long distances using the packet radio network.

Packet BBS operations:

Many cities have one or more packet Bulletin Board System (BBS) available on the local packet network. Amateurs can check into the BBSes and read messages from other packet users on almost any topic. BBSes are networked together over the packet network to allow messages to reach a broader audience than just your local BBS users. Private messages may also be sent to other packet operators, either locally or who use other BBSes. BBSes have the latest ARRL, AMSAT, and propagation bulletins. Many BBSes have a file section containing various text files full of information on amateur radio in general.

DX Packet Cluster:

A recent development is use of packet radio for DX spotting. HF operators connect to the local DX Packet Cluster for the latest reports on DX. Often a user will 'spot' some hot DX and distribute the DX report real time.

File Transfer:

With special software, amateurs can pass any binary files to other amateurs. Currently, this is done with TCP/IP communications, YAPP, and other specialized protocols.

Satellite Communications:

Many of the amateur radio satellites contain microcomputer systems that can provide special information to amateurs. Some satellites contain CCD cameras on board and you can download images of the earth and the

stars. Others provide store and forward packet mailboxes to allow rapid message transfers over long distances. Some satellites use AX.25, some use special packet protocols developed for satellite communications. A few transmit AX.25 packets over FM transmitters, but most use SSB transmissions.

1.4 Why packet over other digital modes?

Packet has three great advantages over other digital modes: transparency, error correction, and automatic control.

The operation of a packet station is transparent to the end user; connect to the other station, type in your message, and it is sent automatically. The Terminal Node Controller (TNC) automatically divides the message into packets, keys the transmitter and sends the packets. While receiving packets, the TNC automatically decodes, checks for errors, and displays the received messages. In addition, any packet TNC can be used as a packet relay station, sometimes called a digipeater. This allows for greater range by stringing several packet stations together.

Packet radio provides error free communications because of built in error detection schemes. If a packet is received, it is checked for errors and will be displayed only if it is correct.

With VHF/UHF packet, many countries allow packet operators to operate in automatic control mode. This means that you can leave your packet station on constantly. Other users can connect to you at any time they wish to see if you are home. Some TNC's even have Personal BBSes (sometimes called mailboxes) so other amateurs can leave you messages if you are not at home.

Another advantage of packet over other modes is the ability for many users to be able to use the same frequency channel simultaneously.

1.5 What elements make up a packet station?

TNC (Terminal Node Controller): A TNC contains a modem, a CPU, and the associated circuitry required to convert between RS-232 and the packet radio protocol in use. It assembles a packet from some of the data on the serial line, computing an error check (CRC) for the packet, modulates it into audio frequencies, and puts out appropriate signals to transmit that packet over the connected radio. It also reverses the process, translating the audio that the connected radio receives into a byte stream on the RS-232 port.

Most TNC's currently use 1200 BPS (bits per second) for local VHF and UHF packet, and 300 BPS for longer distance, lower bandwidth HF communication. Higher speeds are available for use in the VHF, UHF, and especially microwave region, but they often require unusual hardware and drivers.

Computer or Terminal: This is the user interface. A computer running a terminal emulator program, a packet-specific program, or just a dumb terminal can be used. For computers, almost any phone modem communications program can be adapted for packet use, but there are also customized packet radio programs available.

A radio: For 1200 BPS UHF/VHF packet, commonly available narrow band FM voice radios are used. For HF packet, 300 BPS data is used over single side band modulation. For high speed packet (anything greater than 1200 BPS), special radios or modified FM radios must be used.

1.6 What do you mean we can all use the same channel?

Packet radio uses a protocol called AX.25. AX.25 specifies channel access (ability to transmit on the channel) to be handled by CSMA (Carrier Sense Multiple Access). If you need to transmit, your TNC monitors the channel to see if someone else is transmitting. If no one else is transmitting, then the TNC keys up the radio, and sends its packet. All the other stations hear the packet and do not transmit until you are done. Unfortunately, 2 stations could accidentally transmit at the same time. This is called a collision. If a collision occurs, neither TNC will receive a reply back from the last packet it sent. Each TNC will wait a random amount of time and then retransmit the packet.

In actuality, a more complex scheme is used to determine when the TNC transmits. See the "AX.25 Protocol Specification" for more information.

1.7 What is AX.25?

AX.25 (Amateur X.25) is the communications protocol used for packet radio. A protocol is a standard for how two computer systems are to communicate with each other, somewhat analogous to using business format when writing a business letter. AX.25 was developed in the 1970's and based of the wired network protocol X.25. Because of the difference in the transport medium (radios vs wires) and because of different addressing schemes, X.25 was modified to suit amateur radio's needs. AX.25 includes a digipeater field to allow other stations to automatically repeat packets to extend the range of transmitters. One advantage of AX.25 is that every packet sent contains the sender's and recipient's amateur radio callsign, thus providing station identification with every transmission.

1.8 Definitions: Commonly used terms in Amateur Packet Radio

44 net - The class A network designator for TCP/IP amateur packet radio. All numerical TCP/IP addresses are in the format 44.xxx.xxx.xxx.

AFSK - Audio Frequency Shift Keying. A method of representing digital information by using different audio frequencies modulated on a carrier.

AMPR - Amateur Packet Radio.

ampr.org - The high level domain recognized on Internet for amateur packet radio TCP/IP.

AX.25 - Amateur X.25 protocol. The basis of most packet systems. See section 1.7 for more information.

CRC - Cyclic Redundancy Check. The error detection scheme included in each packet. Verify that the packet was received error free.

CSMA - Carrier Sense Multiple Access. A system allowing many stations to use the same radio frequency simultaneously for packet communications.

digi - Short name for a digipeater

digipeater - A packet radio station used for repeating packets. See section 3.3.1 for more information.

FCC - Federal Communications Commission. Regulates and issues licenses for amateur radio in the United States.

FM - Frequency Modulation. The radio modulation scheme used for VHF and UHF packet communications.

FSK - Frequency Shift Keying. A method of representing digital information by shifting the radio carrier frequency different amounts to represent ones and zeros.

HDLC - (High-Level Data Link Control Procedures) A standard for high level link control. (ISO 3309)

KA9Q NOS - (KA9Q Network Operating System) A TCP/IP program originally developed by Phil Karn, KA9Q. Currently there are many different versions available. See section 3.2 for more information.

KA-Node - A simple networking scheme developed by TNC maker Kantronics. See section 3.3.2 for more info.

KISS - Keep It Simple Stupid. A simple interface developed for communications between TNCs and computers. This allows for most of the packet processing to be handled by the computer. Commonly used with packet TCP/IP software.

LAN - Local Area Network. A packet network developed for communications throughout a city or region. Often, the LAN uses separate frequencies from inter-city packet links.

modem - MODulator/DEModulator. Converts the analog signals into a binary data stream (a series of ones and zeros) for the TNC or a micro-computer. First step in decoding packets. It also converts binary data to analog, which is the last step in encoding packets.

NET/ROM - A scheme for packet radio networking. See section 3.3 for more information.

NODE - A network node. Often a network node running NET/ROM.

PPP - Point to Point Protocol. PPP is another protocol used for moving IP frames over a serial line. It supports host authentication, and non-transparent serial lines. It also has a standard way of negotiating header (and potentially data) compression over the line. See also SLIP.

protocol - A standard used for intercommunications between different computer systems.

RS-232 (RS-323C) - A (more or less) standard for interconnection of serial peripherals to small computer systems. In packet radio, RS-232 is the most common interface between TNC's and the Computer/Terminal.

SLIP - Serial Line Internet Protocol. A trivial protocol for putting IP frames over a serial line to do (potentially) cheap TCP/IP networking. Approximately the same as KISS, except over wireline networks. See also PPP.

SSB - Single Side Band. The radio modulation scheme used for HF packet and satellite packet communications.

TAPR - Tucson Amateur Packet Radio. Was the first group to create a packet radio TNC using AX.25. Soon a TAPR TNC became cloned by many others. TAPR continues development of packet radio equipment.

TCP/IP - Transmission Control Protocol/Internet Protocol. A set of utility programs used over AX.25. See sections 3.2 for more information.

TNC - Terminal Node Controller. See section 1.5 for more information.

1.9 Do's and Don'ts : Rules and Regulations

NOTE: These regulations apply only to amateurs regulated by the FCC (United States), but often are similar to regulations in other countries.

[Since I have no experience with amateur radio in other countries, I cannot make any comments. Please bring any notable exceptions to my attention. -ed]

Although there are no specific rules that apply to amateur packet radio, the general amateur radio rules force some restrictions on packet usage.

Can I set up a TNC at home and one at work so I can check my Electronic mail via packet?

This cannot be done without special restrictions. Amateur radio rules prohibit any business. Since you could have mail from your boss (or maybe even someone selling you something over Internet), that would constitute business activity and is specifically prohibited.

Profanity can also be a complication. Since you have no control over the language used in E-mail, proper filtering is required. Since no filter scheme can catch every offense, it is best to say every message must be hand filtered.

I would like to set up a packet radio gateway between a land line computer network and the packet network. Is this possible?

Yes, and there are several such gateways in use, but they must be managed with caution. Electronic mail may be passed FROM the packet network INTO the land line network without intervention. However, mail passed TO packet radio is considered third party traffic (the sender is not an amateur) and these messages must be hand filtered to ensure that rules of message content are followed.

It's my license if I use packet radio illegally anyway, so what does anyone else care!?

Packet radio is one of the few NETWORKED systems in amateur radio. Many people have helped develop the network and there are many amateurs who own parts of the packet radio network. Sending packet BBS mail, digipeating, and sharing the channel involves the licenses of MANY people. Because of FCC rules stating that anything to come out of a transmitter (either in automatic mode or via your direct control) is the licensee's responsibility, one illegal message sent over the packet radio network could literally jeopardize the licenses of thousands of other amateurs. When in doubt, it is best to check with other amateurs about sending the message before it is sent.

I have some ideas on how to use packet radio in a new way, but I don't know if it is legal. Who could tell me if I can do it legally?

The worst thing you can do is talk to the FCC about such an issue. The FCC rules are written to be general enough to encompass but not restrict new radio activities. In the past, any non-thought-out requests sent to the FCC have meant a reduction of privilege for all amateur radio operators.

The best source for legal assistance is your national amateur radio association. In the United States, that is the American Radio Relay League (ARRL). Another good place for such conversations is over Usenet/packet mailing lists, or the amateur radio BBS network.

2 Computing Network Resources for Amateur Packet radio

This section summarizes the resources available on Internet for amateur packet radio operators.

2.1 What Newsgroups/mailing lists are available?

This is a list of all groups that regularly discuss amateur packet radio. For newsgroups, join the group through use of your news reader. For mailing lists, add a '-request' to the end of the list name to request subscriptions. For listserv groups, send mail to

'listserv' at the node which contains the list. The first line of the mail should be 'SUBSCRIBE groupname yourname'. Send the command 'help' for more information.

rec.radio.amateur.packet (Newsgroup): General discussions involving Packet Radio.

rec.radio.amateur.misc (Newsgroup): General amateur radio discussion. Usually does not contain any particular information about Amateur Packet Radio.

rec.radio.amateur.policy (Newsgroup): Discussion of regulation policies regarding every aspect of amateur radio. Occasionally deals with policies of packet coordination and legal issues of packet radio.

rec.radio.swap (Newsgroup): General For-Sale for any radio equipment. Occasionally will have packet equipment for sale. Recommended location for any amateur packet radio for-sale items.

info-hams@ucsd.edu (Listserv group): A digest redistribution of the rec.radio.amateur.misc Usenet discussion.

packet-radio@ucsd.edu (Listserv group): A digest redistribution of the rec.radio.amateur.packet Usenet discussion.

ham-policy@ucsd.edu (Listserv group): A digest redistribution of the rec.radio.amateur.policy Usenet discussion

hs-modem@wb3ffv.ampr.org (Mailing list): Discussion of high speed modems and radios available and future plans. Also includes discussion of networking using high speed modems.

tcp-group@ucsd.edu (Mailing list): Group discussion of technical developments of TCP/IP over packet radio and use of the NOS TCP/IP programs.

gateways@uhm.ampr.org (Mailing list): Discussion of current gateways and future plans for gateways. May deal with sensitive internetworking issues.

listserv@knuth.mtsu.edu has several interesting mailing lists available:

GRAPES-L Discussions with GRAPES (Georgia Radio Amateur Packet Enthusiasts Society) on 56kb WAN's and the WA4DSY 56kb RF modem that they distribute.

TENNET-L Tennessee's efforts at a coordinated high-speed RF packet network

GRACILIS-L Discussions on Gracilis tcp/ip packet equipment. Includes some of the people from Gracilis.

KA9Q-UNIX Discussions on porting and using various versions of KA9Q Unix/Xenix NET/NOS under any of a variety of Unix/Xenix variants.

TNV-HAMS General discussions amoung email connected
amateur radio operators in and surrounding
Tennessee

Send a message with a body of "HELP" to get help from the list server. Also,
Internet users may now INTERACTIVELY work with the ListServ there by:

telnet knuth.mtsu.edu 372

or

telnet 161.45.1.1 372

For all lists at ucsd.edu, archives may be found via anonymous FTP at
ucsd.edu. Some listserv groups also have archives. Send the command
'help' to the group's listserv for more information. Digest mailings
for the ucsd.edu discussions are also available. Send mail to
listserv@ucsd.edu with the first line being 'longindex' for more
information.

Terry Stader (KA8SCP) <tstader@aol.com> maintains a list of Mac
packet-related software, and posts it periodically (somewhat less often
than monthly) to rec.radio.amateur.packet.

There appears to be a mailing list about NOS on hydra.carleton.ca, but
I don't have much more detail. Send a message to
nos-bbs-request@hydra.carleton.ca. The list name is nos-bbs@hydra.carelton.ca.

2.2 What anonymous FTP sites and electronic mail servers are available
for getting packet radio information and programs?

This is a sampling of FTP sites that carry amateur packet radio related
files. Consult the Archie archive server for info on locating
particular files. For more information on using archie, send mail to
archie@cs.mcgill.edu with the line 'help'.

ucsd.edu

Primary distribution site of KA9Q's derived TCP/IP packages. Also,
general packet radio information in the /hamradio/packet subdirectory.

wsmr-simtel20.army.mil

Very large collection of amateur radio software.

wuarchive.wustl.edu

Mirror site of Simtel20 archives. Unix directory structure, which is
easier to use then the simtel20 archive.

ftp.cs.buffalo.edu

Supplimental archive site for amateur radio information. Contains
current copies of all rec.radio.amatuer.* FAQ's.

tomcat.gsfc.nasa.gov

Packet software including Baycomm, ROSE, G8BPQ, NOS, etc.
(I have one report (from George Hitz, W1DA) that this FTP site will be
down until the end of this summer, 1993. Reportedly the site admin is
going to be in Sweden.)

akutaktak.andrew.cmu.edu

SoftKiss for the Mac, in /aw0g. Requires NET/Mac.
SoftKiss is an init/cdev/driver that allows a MAC to do packet using
a Poor Man's Packet modem.

sumex-aim.stanford.edu

NET/Mac is the port of KA9Q's NET program. It doesn't have nifty features
like scrolling or saving the windows, but the individual sessions can be
recorded into a file.

As for mail servers, there is only one that I know of at the moment:

Ham-Server@GRAFex.Cupertino.CA.US

This mail server, which is run by Steve Harding (KA6ETB), has a wide
variety of information on most aspects of amateur radio, not just digital
modes. Send a message with the body HELP to get a fairly useful listing.
Also note that Steve posts the index from the server approximately weekly
to rec.radio.amateur.misc, rec.radio.amateur.packet, and sbay.hams.

2.3 How do I contact the ARRL via electronic mail?

There are various addresses at ARRL HQ, but the most important one is
probably info@arrl.org. That is where general information about the
ARRL can be acquired. This address reaches a person, so you'll have
to specify what/who you're looking for.

2.4 Are there any gateways for mail or news between Internet and
Amateur Packet radio?

Internet / Packet Radio BBS Gateways

There are currently two comprehensive gateways between the Internet and
the packet radio BBS system. One is run by Jim Durham, W2XO, in Pennysylvania
and the other, which allows access to PBBS bulletins, as well as mail,
is run by Bob Arasmith, N0ARY, in California.

2.4.1 The W2XO Gateway

To mail from Internet to Packet:

1. Mail to: "bbs@w2xo.pgh.pa.us"

2. Make the first line of the text a Packet BBS "send" command, ie:
SP TOCALL @ BBSCALL.ROUTING-HINTS < FROMCALL

3. The "subject" line of the Internet mail becomes the "title" line
of the Packet BBS mail.

NOTE: Because of FCC regulations, Jim must hand filter each message sent FROM Internet TO the Amateur Packet Radio BBS system. Messages should be of minimal length and appropriate content. Read Section 1.9 (Do's and Don'ts: Rules and Regulations) regarding appropriate usage of packet radio for more information. Always include the routing hints with the BBS callsign.

To mail from Packet to Internet:

1. The amateur radio operator must have his callsign registered in the gateway alias list. If you want to mail from packet to a specific amateur on Internet, send mail to 'durham@w2xo.pgh.pa.us' (Internet) or 'W2XO @ W2XO.#WPA.PA.USA.NOAM' (Packet BBS mail) with his/her amateur callsign and their Internet address.

2. Once the above is accomplished, packet BBS mail should be sent to 'CALL @ W2XO.#WPA.PA.USA.NOAM'. The mail will automatically be forwarded to the Internet address of the amateur with the 'CALL' callsign.

Jim Durham's Internet address is 'durham@w2xo.pgh.pa.us'.

2.4.2 The N0ARY Internet mail <-> full packet BBS gateway

Bob Arasmith, N0ARY, runs a gateway between the Internet mail system and PBBS system. His gateway allows you to read, post, and respond to other postings on the PBBS system via email. For more information, send mail to gateway_info@arasmith.com.

2.4.3 LAN Gateways (Packet wormholes via Internet)

Currently a group of amateurs are experimenting with connecting packet LANs together via Internet IP inside IP Encapsulation. Some of the gateways only accept TCP/IP packets, others AX.25 packets. These gateways uses the Internet as a transport medium, thus it is impossible to access the packet radio network from Internet. For more information, join the Gateways mailing list by sending mail to "gateways-request@uhm.ampr.org".

3 Networking and special packet protocols

This is a sample of some of the more popular networking schemes available today. By far, there are more customized networking schemes used than listed. Consult your local packet network guru for specific network information.

3.1 Are there any other protocols in use other than AX.25?

AX.25 is considered the defacto standard protocol for amateur radio use and is even recognized by many countries as a legal operation mode. However, there are other standards. TCP/IP is used in some areas for amateur radio. Also, some networking protocols use other packet formats than AX.25.

Often, special packet radio protocols are encapsulated within AX.25 packet frames. This is done to insure compliance with regulations requiring packet radio transmissions to be in the form of AX.25. However, details of AX.25 encapsulation rules vary from country to country.

3.2 What is TCP/IP?

TCP/IP stands for Transmission Control Protocol/Internet Protocol. This is commonly used over the Internet wired computer network. The TCP/IP suite contains different transmission facilities such as FTP (File Transfer Protocol), SMTP (Simple Mail Transport Protocol), Telnet (Remote terminal protocol), and NNTP (Net News Transfer Protocol)

TCP/IP doesn't use all of the AX.25 protocol. Instead, it uses special AX.25 packets called Unnumbered Information (UI) packets and then puts its own special protocol (called IP) on top of AX.25. This is used to increase efficiency of its transmissions, since IP does not require packets to be "reliable", that is to say, guaranteed delivered error-free. TCP handles the retransmission of lost and garbled packets in its own way, at a higher level. Therefore the extra information in an AX.25 "VC" (virtual circuit) frame is not useful, and thus consuming needed bandwidth.

The KA9Q NOS program (also called NET) is the most commonly used version of TCP/IP in packet radio. NOS originally was written for the PC compatible. However, NOS has been ported to many different computers such as the Amiga, Macintosh, Unix, and others. Smaller computers like the Commodore 64 and the Timex-Sinclar do not currently have version of NOS available.

3.3 Networking Schemes

What are some of those other networking schemes?

During the early days of amateur packet radio, it became apparent that a packet network was needed. To this end, the following packet network schemes where created.

Digipeaters

The first networking scheme with packet radio was Digipeaters. Digipeaters would simply look at a packet, and if its call was in the digipeater field, would resend the packet. Digipeaters allow the extension of range of a transmitter by retransmitting any packets addressed to the digipeater.

This scheme worked well with only a few people on the radio channel. However, as packet became more popular, digipeaters soon were clogging up the airwaves with traffic being repeated over long distances. Also, if a packet got lost by one of the digipeaters, the originator station would have to retransmit the packet again, forcing every digipeater to transmit again and causing more congestion.

KA-Nodes

Kantronics improved on the digipeater slightly and created KA-Nodes. As with digipeaters, KA-Nodes simply repeat AX.25 frames. However, a KA-Node acknowledges every transmission each link instead of over the entire route. Therefore, instead of an end-to-end acknowledgement, KA-Nodes allow for more reliable connections with fewer timeouts, because acknowledgments are only carried on one link. KA-Nodes therefore are more reliable than digipeaters, but are not a true network. It is similar like having to wire your own telephone network to make a phone call.

NET/ROM

NET/ROM was one of the first networking schemes to try to address the problems with digipeaters. A user connects to a NET/ROM station as if connecting to any other packet station. From there, he can issue commands to instruct the station to connect to another user locally or connect to another NET/ROM station. This connect, then connect again, means that to a user's TNC, you are connected to a local station only and its transmissions do not have to be digipeated over the entire network and risk loosing packets. This local connection proved to be more reliable.

NET/ROM is a commercial firmware (software put on a chip) program that is used as a replacement ROM in TAPR type TNC's. Other programs are available to emulate NET/ROM. Among them are TheNet, G8BPQ node switch, MSYS, and some versions of NET.

NET/ROM nodes, at regular intervals, transmit to other nodes their current list of known nodes. This is good because as new nodes come on-line, they are automatically integrated in the network. However, if band conditions such as ducting occur, ordinarily unreachable nodes can be entered into node lists. This causes the NET/ROM routing software to choose routes to distant nodes that are impossible. This problem requires users to develop a route to a distant node manually defining each hop instead of using the automatic routing feature.

ROSE

ROSE is another networking protocol derived from X.25. Each ROSE node has a static list of the nodes it can reach. For a user to use a ROSE switch, he issues a connect with the destination station and in the digipeater field places the call of the local rose switch and the distant rose switch the destination station can hear. Other then that, the network is completely transparent to the user.

ROSE's use of static routing tables ensures that ROSE nodes don't attempt to route packets through links that aren't reliably reachable, as NET/ROM nodes often do. However, ROSE suffers from the inability to automatically update its routing tables as new nodes come online. The operators must manually update the routing tables, which is why ROSE networks require more maintainance.

3.4 BBS message transfer

Many of the BBS programs used in packet radio allow for mail and bulletins to be transferred over the packet radio network. The BBSes use a special forwarding protocol developed originally by Hank Oredsen, W0RLI.

Besides full service BBSes, many TNC makers have developed Personal BBS software to allow full service BBSes to forward mail directly to the amateur's TNC. This allows operators to receive packet mail at night and avoid tying up the network during busy hours.

--
Steve Watt KD6GGD Packet: KD6GGD @ N0ARY.#NOCAL.CA.USA.NA
ICBM: 121W 56' 53.1" / 37N 20' 16.7" Internet: steve@wattres.SJ.CA.US
Never trust a computer bigger than you can lift. also news,root,sys,uucp,...

48. Re: What do TCP/IP packets look like?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-22 17:36:55 UTC
From: lawrence@combdyn.com
Message-ID: <1993Jul22.173655.10712@combdyn.com>
Source record: 51887

In article <22jk6h$2rjt@ilx018.intel.com> dbraun@iil.intel.com writes:
>
>I have been monitoring a busy packet freq with a DRSI DPK2,
>with MCOM on. It seems that most of the packets are not information
>packets, but something else. Also, some of these are rather long, longer
>than they would have to be for simple acknowledgements. Could
>these really be TCP/IP packets? I believe ka9q TCP/IP
>imbeds its packets within the HDLC(?)/AX25 prococol. But
>how will a TNC in non-kiss mode react when it hears TCP/IP
>packets?
>
>Also, what happens when one netrom node talks to another netrom node?
>Are netrom's higher level protocols implemented as ASCII information
>in a vanilla AX25 packet, or what? Same basic question as for TCP/IP.
>
They could be TCP/IP packets, or they could be Netrom, ROSE, THE-NET, or
BBS packets...or other binary type packets (YAPP?)

NETROM is encapsulated into an AX25 packet, I believe. Similar for
TCP/IP packets....though a little more complicated.

TCP/IP packets are IP packets under AX25 (the IP packet can encapsulate
other packet types like UDP?, TCP, RIP, etc.) But, TCP/IP packets can also
be encapsulated under the NETROM level.

Try running TCP/IP with tracing enabled. It'll decode most of the levels in
a packet.
--
--EMAIL----------------------------PHONE-----------FAX------------
| WORK: lawrence@combdyn.com | (403)529-2162 | (403)529-2516 | CallSign
| HOME: dreamer@lhaven.uumh.ab.ca | (403)526-6019 | disconnected | VE6LKC
----
disclamer = (working_for && !representing) + (Combustion Dynamics Ltd.);

49. Re: 6m MBC: Some Thoughts

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-23 11:14:43 UTC
From: n4hy@runner.ccr-p.ida.org
Message-ID: <N4HY.93Jul23111443@runner.ccr-p.ida.org>
Source record: 51888

Gary says:

>There is a near continuous stream of micrometeors striking the Earth,
>but the ionization trails don't last long enough for even the shortest
>packet to get through, AMTOR might work. Bigger micrometeors are also

Ralph Wallio, W0RPK and I had a connect and exchange using BEL-202
VHF packets via meteors during the Perseids a few years ago, but these
are some of the bigger ones. UNc Sam does Meteor scatter packets but
they use huge-mongous antennas and power at 50 Mhz.

Bob

--

Robert W. McGwier | n4hy@ccr-p.ida.org
Center for Communications Research | Interests: amateur radio, astronomy,golf
Princeton, N.J. 08520 | Asst Scoutmaster Troop 5700, Hightstown

50. Guide to the Personal Radio Newsgroups

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-23 16:48:10 UTC
From: pschleck@unomaha.edu
Message-ID: <radio/personal-intro-1-743446079@unomaha.edu>
Source record: 51889
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.packet,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.info,rec.answers,news.answers

```
Posted-By: auto-faq 2.4
Archive-name: radio/personal-intro
Revision: 1.4 06/30/93 12:04:14
Changes: new rec.radio.amateur.* newsgroups, cs.utexas.edu gateway

(Note: The following is reprinted with the permission of the author.
Due to the recent reorganization, it is also on a temporarily-
accelerated posting schedule as follows:

July weekly
August bi-weekly
September back to monthly)

This message describes the rec.radio.amateur.*, rec.radio.cb, rec.radio.info,
and rec.radio.swap newsgroups. It is intended to serve as a guide for the new
reader on what to find where. Questions and comments may be directed to the
author, Jay Maynard, K5ZC, by Internet electronic mail at
jmaynard@oac.hsc.uth.tmc.edu. This message was last changed on 30 June 1993 to
add the groups created during the latest reorganization vote and the
description of the cs.utexas.edu gateway.

History
=======

Way back when, before there was a Usenet, the Internet hosted a mailing list
for hams, called (appropriately enough) INFO-HAMS. Ham radio discussions
were held on the mailing list, and sent to the mailboxes of those who had
signed up for it. When the Usenet software was created, and net news as we
now know it was developed, a newsgroup was created for hams: net.ham-radio.
The mailing list and the newsgroup were gatewayed together, eventually.

As the net grew, and as packet radio came into vogue, packet discussion began
to dominate other topics in the group and on the list. This resulted in the
logical solution: a group was created to hold the packet discussion, and
another corresponding mailing list was created as well: net.ham-radio.packet
and PACKET-RADIO, respectively.

These two groups served for several years, and went through Usenet's Great
Renaming essentially unchanged, moving from net.ham-radio[.packet] to
rec.ham-radio[.packet]. Readership and volume grew with the rest of the
network.

The INFO-HAMS mailing list was originally run from a US Army computer at
White Sands Missile Range, SIMTEL20. There were few problems with this
```

arrangement, but one was that the system was not supposed to be used for commercial purposes. Since one of hams' favorite pastimes is swapping gear, it was natural for hams to post messages about equipment for sale to INFO-HAMS/rec.ham-radio. This ran afoul of SIMTEL20's no-commercial-use restriction, and after some argument, a group was created specifically for messages like that: rec.ham-radio.swap. This group wasn't gatewayed to a mailing list, thus avoiding problems.

While all this was happening, other folks wanted to discuss other aspects of the world of radio than the personal communications services. Those folks created the rec.radio.shortwave and rec.radio.noncomm newsgroups, and established the precedent of the rec.radio.* hierarchy, which in turn reflected Usenet's overall trend toward a hierarchical name structure.

The debate between proponents of a no-code ham radio license and its opponents grew fierce and voluminous in late 1989 and 1990. Eventually, both sides grew weary of the debate, and those who had not been involved even more so. A proposal for a newsgroup dedicated to licensing issues failed. A later proposal was made for a group that would cover the many recurring legal issues discussions. During discussion of the latter proposal, it became clear that it would be desirable to fit the ham radio groups under the rec.radio.* hierarchy. A full-blown reorganization was passed by Usenet voters in January 1991, leading to the overall structure we now use.

After the reorganization, more and more regular information postings began to appear, and were spread out across the various groups in rec.radio.*. Taking the successful example of the news.answers group, where informational postings from across the net are sent, the group rec.radio.info was created in December, 1992, with Mark Salyzyn, VE6MGS, initially serving as moderator.

In January, 1993, many users started complaining about the volume in rec.radio.amateur.misc. This led to a discussion about a second reorganization, which sparked the creation of a mailing list by Ian Kluft, KD6EUI. This list, which was eventually joined by many of the most prolific posters to the ham radio groups, came up with a proposal to add 11 groups to the rec.radio.amateur hierarchy in April 1993. The subsequent vote, held in May and early June, approved the creation of five groups: rec.radio.amateur.digital.misc (to replace .packet), .equipment, .homebrew, .antenna, and .space.

The Current Groups

I can hear you asking, "OK, so this is all neat history, but what does it have to do with me now?" The answer is that the history of each group has a direct bearing on what the group is used for, and what's considered appropriate where.

The easy one is rec.radio.amateur.misc. It is what rec.ham-radio was renamed to during the reorganization. Any message that's not more appropriate in one of the other groups belongs here, from contesting to DX to ragchewing on VHF to information on becoming a ham.

The group rec.radio.amateur.digital.misc is for discussions related to (surprise!) digital amateur radio. This doesn't have to be the common two-meter AX.25 variety of packet radio, either; some of the most knowledgeable folks in radio digital communications can be found here, and anything in the general area is welcome. The name was changed to emphasize this, and to encourage discussion not only of other text-based digital modes, such as AMTOR, RTTY, and Clover, but things like digital voice and video as well. The former group, rec.radio.amateur.packet, has not been removed as of this writing, but it is obsolete, and you should use .digital.misc instead. The group has the .misc as part of the name to allow further specialization if the users wish it, such as .digital.tcp-ip.

The swap group is now rec.radio.swap. This recognizes a fact that became evident shortly after the original group was formed: Hams don't just swap ham radio gear, and other folks besides hams swap ham equipment. If you have radio equipment, or test gear, or computer stuff that hams would be interested in, here's the place. Equipment wanted postings belong here too. Discussions about the equipment generally don't; if you wish to discuss a particular posting with the buyer, email is a much better way to do it, and the other groups, especially .equipment and .homebrew, are the place for public discussions. There is now a regular posting with information on how to go about buying and selling items in rec.radio.swap; please refer to it before you post there.

The first reorganization added two groups to the list, one of which is rec.radio.amateur.policy. This group was created as a place for all the discussions that seem to drag on interminably about the many rules, regulations, legalities, and policies that surround amateur radio, both existing and proposed. The neverending no-code debate goes here, as does the New Jersey scanner law, the legality of ordering a pizza on the autopatch, what a bunch of rotten no-goodniks the local frequency coordinating body is, and so on.

The other added group is rec.radio.cb. This is the place for all discussion about the Citizens' Band radio service. Such discussions have been very inflammatory in rec.ham-radio in the past; please do not cross-post to both rec.radio.cb and rec.radio.amateur.* unless the topic is genuinely of interest to both hams and CBers - and very few topics are.

The rec.radio.info group is just what its name implies: it's the place where informational messages from across rec.radio.* may be found, regardless of where else they're posted. As of this writing, information posted to the group includes Cary Oler's daily solar progagation bulletins, ARRL bulletins, the Frequently Asked Questions files for the various groups, and radio modification instructions. This group is moderated, so you cannot post to it directly; if you try, even if your message is crossposted to one of the other groups, your message will be mailed to the moderator, who is currently Mark Salyzyn, VE6MGS. The email address for submissions to the group is rec-radio-info@ve6mgs.ampr.ab.ca. Inquires and other administrivia should be directed to rec-radio-request@ve6mgs.ampr.ab.ca. For more information about rec.radio.info, consult the introduction and posting guidelines that are regularly posted to that newsgroup.

The groups rec.radio.amateur.antenna, .equipment, .homebrew, and .space are for more specialized areas of ham radio: discussions about antennas, commercially-made equipment, homebrewing, and amateur radio space operations. The .equipment group is not the place for buying or selling equipment; that's what rec.radio.swap is for. Similarly, the .space group is specifically about amateur radio in space, such as the OSCAR program and SAREX, the Shuttle Amateur Radio EXperiment; other groups cover other aspects of satellites and space. Homebrewing isn't about making your own alcoholic beverages at home (that's rec.crafts.brewing), but rather construction of radio and electronic equipment by the amateur experimenter.

The rec.radio.amateur.misc, .packet, and .policy groups, and the rec.radio.info group, are available by Internet electronic mail in digest format; send a mail message containing "help" on a line by itself to listserv@ucsd.edu for instructions on how to use the mail server. The rec.radio.swap group is not available for reading by electronic mail. At this writing, the most recently added groups are also not available for reading by electronic mail, although that may change.

All of the groups can be posted to by electronic mail, though, by using a gateway at the University of Texas at Austin. To post a message this way, change the name of the group you wish to post to by replacing all of the '.'s with '-'s - for example, rec.radio.swap becomes rec-radio-swap - and send to that name@cs.utexas.edu (rec-radio-swap@cs.utexas.edu, for example). You may crosspost by including multiple addresses as Cc: entries (but see below). This gateway's continued availability is at the pleasure of the admins at UT-Austin, and is subject to going away at any time - and especially if forgeries and other net.abuses become a problem. You have been warned.

A Few Words on Crossposting

Please do not crosspost messages to two or more groups unless there is genuine interest in both groups in the topic being discussed, and when you do, please include a header line of the form "Followup-To: group.name" in your article's headers (before the first blank line). This will cause followups to your article to go to the group listed in the Followup-To: line. If you wish to have replies to go to you by email, rather than be posted, use the word "poster" instead of the name of a group. Such a line appears in the headers of this article.

One of the few examples of productive cross-posting is with the rec.radio.info newsgroup. To provide a filtered presentation of information articles, while still maintaining visibility in their home newsgroups, the moderator strongly encourages cross-posting. All information articles should be submitted to the rec.radio.info moderator so that he may simultaneously cross-post your information to the appropriate newsgroups. Most newsreaders will only present the article once, and network bandwidth is conserved since only one article is propagated. If you make regular informational postings, and have made arrangements with the moderator to post directly to the group, please cross-post as appropriate.

--
Jay Maynard, EMT-P, K5ZC, PP-ASEL | Never ascribe to malice that which can
jmaynard@oac.hsc.uth.tmc.edu | adequately be explained by stupidity.
"If my car ran OS/2, it'd be there by now" -- bumper sticker
GCS d++ p+ c++ l+ m+/- s/++ g++ w++ t+ r

--
73, Paul W. Schleck, KD3FU

pschleck@unomaha.edu

Celebrating 60 years of the Univ. of Maryland ARA - W3EAX (1933-1993)

51. RTTY via Soundblaster?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-25 15:48:40 UTC
From: lodonoho@vax1.tcd.ie
Message-ID: <1993Jul25.154840.1@vax1.tcd.ie>
Source record: 51790

Does anyone know of a program to read RTTY signals via the Soundblaster sound card?

Thanks,

Larry.

52. QRA and YAPP

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-28 02:58:05 UTC
From: imer400@indyvax.iupui.edu
Message-ID: <1993Jul27.215805.1557@indyvax.iupui.edu>
Source record: 51791

Hi, I am new to packet radio and I have run accross two terms I don't know,)YAPP (I think its a download protocal) and qra-locator. I hope this does not fall under FAQ but I did not find these terms in it. Thanks

Martha Rapp, N9PVD
imer400@hyrax.iupui.edu

53. Re: What do TCP/IP packets look like?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-28 03:31:03 UTC
From: Carl Makin <makinc@hhcs.gov.au>
Message-ID: <1993Jul28.133104.794@hhcs.gov.au>
Source record: 51792

In article <22lpgc$1cif@ilx018.intel.com> Doug Braun, dbraun@ilx049.intel.com writes:

> Well, I tried this (TRACE ON). Normal packets have a PID of $F0.
> The "funny" packets have a PID of $CF. Also, the source and destination
> call signs are retpeated in the data area, right after the PID.

They are probably NETROM. I can't remember the PID for NETROm at
the moment though.

If it was TCP/IP then the callsigns wouldn't be repeated in the data,
TCP/IP uses a 32 bit numbers to represent stations.

It's not ROSE because ROSE uses a circuit number after the initial
contact is made to identify the link.

It might be FLEXNET. I have no idea what a flexnet frame looks like.

Carl.
--
Carl Makin (VK1KCM)
makinc@hhcs.gov.au (Internet) / vk1kcm@vk1kcm.act.aus.oc (Amprnet)
"Advertising is the science of arresting human intelligence long
enough to get money from - Stephen Leacock

54. PK232

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-28 12:45:54 UTC
From: cerdini@cismhp.univ-lyon1.fr
Message-ID: <235se2$j8@cismsun.univ-lyon1.fr>
Source record: 51793

New user of a PK232 with packet radio, I'm looking for FTP base where
I can get softwares in relation with PK232. I'm really interesting by
the protocol AX25 (frame level) and the use of TCP/IP in packet. (How
can I use TCP/IP, how can I do..etc)

So if you can help me, tell me !

73 QRO,
--
Michel CERDINI BP5574 69247 Lyon Cedex 05 | E-Mail cerdini@cism.univ-lyon1.fr
BBS/RTC Videotex ZENITH (8 acces) 24h/24 | AX25 F1ITS@FF2LY.FRHA.FRA.EU
Minitel: 7836.1996 - V32b/V42b: 7836.1001 |AmprNet F1ITS.AMPR.ORG [44.151.69.10]

55. Multiple serial ports on a powerbook 160?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-28 13:11:59 UTC
From: bad1679@ultb.isc.rit.edu
Message-ID: <1993Jul28.131159.275@ultb.isc.rit.edu>
Source record: 51794
Cross-posted to: comp.sys.mac.comm,comp.sys.mac.portables,comp.sys.mac.misc,rec.radio.amateur.digital.misc

Hi everyone,

Is there a way to add serial ports to a powerbook 160? Ideally, I want
to end up with 3-4 serial ports. (I want to use one for a slip link to
my Amiga, the other for KA9Q Net (tcp/ip) over a radio modem, the third for a
landline modem.). I am looking for something that will let me run all three
connections concurrently (not just switch them). Can I expect any
software problems running KA9Q Net and zterm over different lines with
this expansion (if it exists?).

Any pointers are much appreciated.

Please reply via email, to make sure I get your reply.

Thanks..

Bernie

--
Electrical Engineering, Rochester Institute of Technology, Rochester,NY
Ax25 Packet: NU1S @ WB2PSI.#WNY.NY.USA.NOAM (normal packet route)
TCP/IP: nu1s@nu1s.ampr.org [44.69.0.37]
Internet (school): bad1679@ultb.isc.rit.edu

56. Looking for a portable decoder for FAX, Baudot and SITOR

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-28 18:45:23 UTC
From: ernst@ic.Berkeley.EDU
Message-ID: <1993Jul28.184523.14492@pasteur.Berkeley.EDU>
Source record: 51795
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.shortwave

I am basically interested in receiving weather information on a boat. I currently have a Lowe HF 150, which is pretty portable and I am now looking for a decoder. Universal has a new small device, called M-400, but this has no tuning aid for FAX. Does anybody have experience how well it performs?

I also have a Mac Powerbook, but it looks like that virtually all software is written for PC's. Can anybody recommend a good computer interface and software for the Mac or do I have to 'downgrade' to a PC? Pointers to some written information would be also very helpful. (I already have the Klingenfuss Utility and Fax Guide.)

Any help is much appreciated!

Ernst

57. Want TNC firmware info

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-07-29 00:17:22 UTC
From: mead@hamal.usc.edu
Message-ID: <2374ui$dni@hamal.usc.edu>
Source record: 51796

I have the following firmware in my TNC and while it
seems to function okay, I'd like some documentation
on the features and changes from version 1.1.6.
There are a number of new on/off and numeric variables
that it would be nice to understand, especially relating to
9600 bps operation vs. 1200 bps.
Thanks, Dick - WB6NGC@K6VE, mead@usc.edu

Tucson Amateur Packet Radio TNC-2
AX.25 Level 2 Version 2.0 + BLP 1.0
Release 1.1.8a 08/30/92 - 32K RAM
Checksum $C4

58. Guide to the Personal Radio Newsgroups

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-01 16:41:06 UTC
From: pschleck@unomaha.edu
Message-ID: <radio/personal-intro-1-744223261@unomaha.edu>
Source record: 51797
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.packet,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.info,rec.answers,news.answers

```
Posted-By: auto-faq 2.4
Archive-name: radio/personal-intro
Revision: 1.4 06/30/93 12:04:14
Changes: new rec.radio.amateur.* newsgroups, cs.utexas.edu gateway

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arrangement, but one was that the system was not supposed to be used for commercial purposes. Since one of hams' favorite pastimes is swapping gear, it was natural for hams to post messages about equipment for sale to INFO-HAMS/rec.ham-radio. This ran afoul of SIMTEL20's no-commercial-use restriction, and after some argument, a group was created specifically for messages like that: rec.ham-radio.swap. This group wasn't gatewayed to a mailing list, thus avoiding problems.

While all this was happening, other folks wanted to discuss other aspects of the world of radio than the personal communications services. Those folks created the rec.radio.shortwave and rec.radio.noncomm newsgroups, and established the precedent of the rec.radio.* hierarchy, which in turn reflected Usenet's overall trend toward a hierarchical name structure.

The debate between proponents of a no-code ham radio license and its opponents grew fierce and voluminous in late 1989 and 1990. Eventually, both sides grew weary of the debate, and those who had not been involved even more so. A proposal for a newsgroup dedicated to licensing issues failed. A later proposal was made for a group that would cover the many recurring legal issues discussions. During discussion of the latter proposal, it became clear that it would be desirable to fit the ham radio groups under the rec.radio.* hierarchy. A full-blown reorganization was passed by Usenet voters in January 1991, leading to the overall structure we now use.

After the reorganization, more and more regular information postings began to appear, and were spread out across the various groups in rec.radio.*. Taking the successful example of the news.answers group, where informational postings from across the net are sent, the group rec.radio.info was created in December, 1992, with Mark Salyzyn, VE6MGS, initially serving as moderator.

In January, 1993, many users started complaining about the volume in rec.radio.amateur.misc. This led to a discussion about a second reorganization, which sparked the creation of a mailing list by Ian Kluft, KD6EUI. This list, which was eventually joined by many of the most prolific posters to the ham radio groups, came up with a proposal to add 11 groups to the rec.radio.amateur hierarchy in April 1993. The subsequent vote, held in May and early June, approved the creation of five groups: rec.radio.amateur.digital.misc (to replace .packet), .equipment, .homebrew, .antenna, and .space.

The Current Groups

I can hear you asking, "OK, so this is all neat history, but what does it have to do with me now?" The answer is that the history of each group has a direct bearing on what the group is used for, and what's considered appropriate where.

The easy one is rec.radio.amateur.misc. It is what rec.ham-radio was renamed to during the reorganization. Any message that's not more appropriate in one of the other groups belongs here, from contesting to DX to ragchewing on VHF to information on becoming a ham.

The group rec.radio.amateur.digital.misc is for discussions related to (surprise!) digital amateur radio. This doesn't have to be the common two-meter AX.25 variety of packet radio, either; some of the most knowledgeable folks in radio digital communications can be found here, and anything in the general area is welcome. The name was changed to emphasize this, and to encourage discussion not only of other text-based digital modes, such as AMTOR, RTTY, and Clover, but things like digital voice and video as well. The former group, rec.radio.amateur.packet, has not been removed as of this writing, but it is obsolete, and you should use .digital.misc instead. The group has the .misc as part of the name to allow further specialization if the users wish it, such as .digital.tcp-ip.

The swap group is now rec.radio.swap. This recognizes a fact that became evident shortly after the original group was formed: Hams don't just swap ham radio gear, and other folks besides hams swap ham equipment. If you have radio equipment, or test gear, or computer stuff that hams would be interested in, here's the place. Equipment wanted postings belong here too. Discussions about the equipment generally don't; if you wish to discuss a particular posting with the buyer, email is a much better way to do it, and the other groups, especially .equipment and .homebrew, are the place for public discussions. There is now a regular posting with information on how to go about buying and selling items in rec.radio.swap; please refer to it before you post there.

The first reorganization added two groups to the list, one of which is rec.radio.amateur.policy. This group was created as a place for all the discussions that seem to drag on interminably about the many rules, regulations, legalities, and policies that surround amateur radio, both existing and proposed. The neverending no-code debate goes here, as does the New Jersey scanner law, the legality of ordering a pizza on the autopatch, what a bunch of rotten no-goodniks the local frequency coordinating body is, and so on.

The other added group is rec.radio.cb. This is the place for all discussion about the Citizens' Band radio service. Such discussions have been very inflammatory in rec.ham-radio in the past; please do not cross-post to both rec.radio.cb and rec.radio.amateur.* unless the topic is genuinely of interest to both hams and CBers - and very few topics are.

The rec.radio.info group is just what its name implies: it's the place where informational messages from across rec.radio.* may be found, regardless of where else they're posted. As of this writing, information posted to the group includes Cary Oler's daily solar progagation bulletins, ARRL bulletins, the Frequently Asked Questions files for the various groups, and radio modification instructions. This group is moderated, so you cannot post to it directly; if you try, even if your message is crossposted to one of the other groups, your message will be mailed to the moderator, who is currently Mark Salyzyn, VE6MGS. The email address for submissions to the group is rec-radio-info@ve6mgs.ampr.ab.ca. Inquires and other administrivia should be directed to rec-radio-request@ve6mgs.ampr.ab.ca. For more information about rec.radio.info, consult the introduction and posting guidelines that are regularly posted to that newsgroup.

The groups rec.radio.amateur.antenna, .equipment, .homebrew, and .space are for more specialized areas of ham radio: discussions about antennas, commercially-made equipment, homebrewing, and amateur radio space operations. The .equipment group is not the place for buying or selling equipment; that's what rec.radio.swap is for. Similarly, the .space group is specifically about amateur radio in space, such as the OSCAR program and SAREX, the Shuttle Amateur Radio EXperiment; other groups cover other aspects of satellites and space. Homebrewing isn't about making your own alcoholic beverages at home (that's rec.crafts.brewing), but rather construction of radio and electronic equipment by the amateur experimenter.

The rec.radio.amateur.misc, .packet, and .policy groups, and the rec.radio.info group, are available by Internet electronic mail in digest format; send a mail message containing "help" on a line by itself to listserv@ucsd.edu for instructions on how to use the mail server. The rec.radio.swap group is not available for reading by electronic mail. At this writing, the most recently added groups are also not available for reading by electronic mail, although that may change.

All of the groups can be posted to by electronic mail, though, by using a gateway at the University of Texas at Austin. To post a message this way, change the name of the group you wish to post to by replacing all of the '.'s with '-'s - for example, rec.radio.swap becomes rec-radio-swap - and send to that name@cs.utexas.edu (rec-radio-swap@cs.utexas.edu, for example). You may crosspost by including multiple addresses as Cc: entries (but see below). This gateway's continued availability is at the pleasure of the admins at UT-Austin, and is subject to going away at any time - and especially if forgeries and other net.abuses become a problem. You have been warned.

A Few Words on Crossposting
==========

Please do not crosspost messages to two or more groups unless there is genuine interest in both groups in the topic being discussed, and when you do, please include a header line of the form "Followup-To: group.name" in your article's headers (before the first blank line). This will cause followups to your article to go to the group listed in the Followup-To: line. If you wish to have replies to go to you by email, rather than be posted, use the word "poster" instead of the name of a group. Such a line appears in the headers of this article.

One of the few examples of productive cross-posting is with the rec.radio.info newsgroup. To provide a filtered presentation of information articles, while still maintaining visibility in their home newsgroups, the moderator strongly encourages cross-posting. All information articles should be submitted to the rec.radio.info moderator so that he may simultaneously cross-post your information to the appropriate newsgroups. Most newsreaders will only present the article once, and network bandwidth is conserved since only one article is propagated. If you make regular informational postings, and have made arrangements with the moderator to post directly to the group, please cross-post as appropriate.

--
Jay Maynard, EMT-P, K5ZC, PP-ASEL | Never ascribe to malice that which can
jmaynard@oac.hsc.uth.tmc.edu | adequately be explained by stupidity.
"If my car ran OS/2, it'd be there by now" -- bumper sticker
GCS d++ p+ c++ l+ m+/- s/++ g++ w++ t+ r

--
73, Paul W. Schleck, KD3FU

pschleck@unomaha.edu

Celebrating 60 years of the Univ. of Maryland ARA - W3EAX (1933-1993)

59. Wanted: MFJ 1214AM or other Amiga RTTY/CW Interface

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-02 14:08:09 UTC
From: megabyte@chinet.chinet.com
Message-ID: <CB4xxM.I9H@chinet.chinet.com>
Source record: 51799
Cross-posted to: rec.radio.swap,rec.radio.amateur.digital.misc,comp.sys.amiga.misc

I am looking for an MFJ 1214AM, which is the CW/RTTY/ASCII interface for an Amiga computer. If you have such an item to sell/trade or donate to me, please contact me.

Also, if you have any information on any other RTTY/CW interfaces that work with the Amiga, I'd appreciate hearing that too.

--
"It is a pity that even a single drop of this noble
gift of God should be spilled" - J.S. Bach on wine
Mark E. Sunderlin: Technocrat in Winchester, VA KD4HRI
aka Dr. Megabyte: megabyte@chinet.chinet.com (703) 722-9330

60. Need beta testers

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-02 14:18:05 UTC
From: jwl@ferrari.cray.com
Message-ID: <1993Aug2.091806.14790@walter.cray.com>
Source record: 51798

I am in need of a few beta testers for a simple minded communications program that I have developed. It was designed to be used with most of the tnc/tu products around that communicate via an RS-232 port on a PC clone or close compatible. It requires that the user be familiar with the commands of the tnc/tu since it knows nothing about these commands. I intend to distribute this as what is commonly called freeware, but since that term has been trademarked, I think, I can't call it that.

It is more than a normal terminal package, like Telix, Procomm, PCtalk or the others in that it has features that support the special characteristics of tnc's or tu's. Here is a list of some of its features:

- Split window operation, sizes controlled by user.
- Macro key definitions.
- File upload from a function key
- User customizable Help screen
- Most of the non-ascii keys can be used as function keys
- Scroll back feature on the receive window
- Simple status display in the middle of the screen
- Logging of data to a disk file
- Access DOS commands without dropping the link.
- Control of the com port definitions from command line, init file and keyboard.
- Works on 8088 as well as 80486 and everything in-between.
- Status line
- Small enough to work well on resource tight platforms, like laptops.
- Selcal functions, limited unattended operation.
- Times can be in GMT or local time.
- A fairly simple minded station contact logging function.
- User modification of window colors.
-

There are loads of programs that are tailored to specific tnc's and there are dozens of good terminal programs that can control any tnc in a "dumb" (that's a technical term) manner. This program is an attempt to provide the average ham with something in-between. It has a lot of features, but no so many as to make use of the program or the tnc hard. It requires you to know the commands of your tnc, but also gives you the flexibility that only direct communications with a tnc can provide.

If you are familiar with your tnc commands, or are using a tu and want something better than the "dumb" terminal you now are using

drop me a line.

Jim.
jwl@cray.com

--

Jim Lynch, Sales Analyst, Cray Research, Inc. / ARS: K4GVO
Southeast District, Phone: (404) 631-2254, Email: jwl@sedist.cray.com
Suite 270, 200 Westpark Drive, Peachtree City, GA 30269

61. W: infos about DCF-77 receiver

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-03 11:23:32 UTC
From: IFF212@DJUKFA11.BITNET
Message-ID: <93215.132532IFF212@DJUKFA11.BITNET>
Source record: 51801

Hello !!

Is there someone who can give me some informations where I can find schematics to build a DCF-77 receiver? It should have a TTL-compatible output.

Thanks in advance

Markus Wollgarten

iff212@DJUKFA11 or iff212@zam001.zam.kfa-juelich.de

62. Mystery Dumb Terminal

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-03 11:42:45 UTC
From: hcheyney@magnus.acs.ohio-state.EDU
Message-ID: <CMM.0.90.4.744378107.hcheyney@magnus.acs.ohio-state.edu>
Source record: 51800

I am trying to find how to set up a Kimtron KT-7/PC dumb terminal to run Packet. There are no obvious dip switches anywhere inside or out. The baud rate seems to be wrong, possibly too fast. The screen displays cryptic symbols instead of the alphabet and numbers. There appears to be a memory backup battery on the circuit board, so I suspect that there is some sort of a setup procedure.

Any suggestions would be appreciated. A manual would be great.

Harold, N8COM ((~|~))
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(*)/(*)
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63. Looking for gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-03 14:52:30 UTC
From: sford@arrl.org
Message-ID: <1927@arrl.org>
Source record: 51802
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc

Does anyone know of an Internet-to-packet gateway that supports telnet in the Dayton, Cincinnati or Columbus, Ohio areas, or Indianapolis?

Thanks and 73...

Steve, WB8IMY

64. Automatic Packet Reporting System

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-03 22:31:11 UTC
From: raymonda@uranium.EBay.Sun.COM
Message-ID: <23movf$ot6@male.EBay.Sun.COM>
Source record: 51803

There have been a couple articles over the past 2 months in QST
that concerned the Automatic Packet Reporting System. The APRS allows one
to connect the NMEA-0183 output of a LORAN-C or GPS receiver to a packet
system such that the location of the packet station is constantly reported
to a remote location where the location is displayed in real-time on a map.

The article (don't have the reference handy at the moment) gave a
name and address to obtain the software (shareware). It also stated that it
was available on several non-specified BBS systems. Does anyone know if it
is available via FTP on the net? I've checked most of the FTP servers that
carry HAM related info that I know about, but so far haven't found it.

Thanks,
Ray WB6TPU

-- opinions expressed are mine alone and not those of my employer--
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\ \\ /
/ \/ / / Raymond E. Anderson
/ / \//\ Signal Integrity Engineer
\//\ / / Sun Microsystems
/ / /\ / 2550 Garcia Ave. MS MIL04-16
/ \\ \ Mountain View, CA 94043-1100
\ \\
\/ (408) 276-5224
(408) 263-9512 fax
raymond.anderson@Sun.Com

65. Re: Automatic Packet Reporting System

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-04 05:28:17 UTC
From: davidj@rahul.net
Message-ID: <CB7z75.Fp8@rahul.net>
Source record: 51804

In <23movf$ot6@male.EBay.Sun.COM> raymonda@uranium.EBay.Sun.COM (Ray Anderson) writes:

> There have been a couple articles over the past 2 months in QST
>that concerned the Automatic Packet Reporting System. The APRS allows one
>to connect the NMEA-0183 output of a LORAN-C or GPS receiver to a packet
>system such that the location of the packet station is constantly reported
>to a remote location where the location is displayed in real-time on a map.

> The article (don't have the reference handy at the moment) gave a
>name and address to obtain the software (shareware). It also stated that it
>was available on several non-specified BBS systems. Does anyone know if it
>is available via FTP on the net? I've checked most of the FTP servers that
>carry HAM related info that I know about, but so far haven't found it.

I couldn't find it anywhere either, so I asked someone who had posted
about it a few weeks ago to send me a copy. It should also be on
ucsd.edu by now, but maybe not. It is on my ftp site, however:
rahul.net:/pub/davidj/radio.

Please post your experiences with the system. It seems to work in demo
mode but I have not yet hooked it up with a GPS box.

73
David WA6NMF

--
David Josephson <david@josephson.com>

66. Re: Automatic Packet Reporting System

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-04 16:13:04 UTC
From: jeg@ddsdx2.jhuapl.edu
Message-ID: <1993Aug4.161304.9449@aplcen.apl.jhu.edu>
Source record: 51805

In <23movf$ot6@male.EBay.Sun.COM> raymonda@uranium.EBay.Sun.COM (Ray Anderson) writes:

> There have been a couple articles over the past 2 months in QST
>that concerned the Automatic Packet Reporting System. The APRS allows one
>to connect the NMEA-0183 output of a LORAN-C or GPS receiver to a packet
>system such that the location of the packet station is constantly reported
>to a remote location where the location is displayed in real-time on a map.

> The article (don't have the reference handy at the moment) gave a
>name and address to obtain the software (shareware). It also stated that it
>was available on several non-specified BBS systems. Does anyone know if it
>is available via FTP on the net? I've checked most of the FTP servers that
>carry HAM related info that I know about, but so far haven't found it.

> Thanks,
> Ray WB6TPU

>---
>-- opinions expressed are mine alone and not those of my employer--
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> /\
> \\ \
> \ \\ /
> / \/ / / Raymond E. Anderson
> / / \//\ Signal Integrity Engineer
> \//\ / / Sun Microsystems
> / / /\ / 2550 Garcia Ave. MS MIL04-16
> / \\ \ Mountain View, CA 94043-1100
> \ \\
> \/ (408) 276-5224
> (408) 263-9512 fax
> raymond.anderson@Sun.Com

Greetings Ray,

I have uploaded APRS to two sites on the net:

ucsd.edu, don't know if its been posted yet.

rahul.net /pub/davidj/radio directory, file name: aprs114.zip and is avail. for anonymous ftp.

73, John kd3wy

67. Small TNC?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-04 16:40:28 UTC
From: trond@smith.phys.ucalgary.ca
Message-ID: <Aug04.164028.34241@acs.ucalgary.ca>
Source record: 51806

(I posted this to .packet, but maybe this is a better place...:)

Hi

I would like to go portable on packet and now I wonder what is the (physically)
smallest TNC available? I will only need to be active on vhf/uhf. Power
consumption is also an important factor.
It seems to me that a tnc could be made extremely small...

I have not been looking in mags/brochures for years, so I have lost touch with
what the state of the art is. :-)

73
Trond

--
Institute for Space Research |Public PGP| "It is Finished" -God, approx. 32AD
University of Calgary |key soon | "Shut up and Stop Whining" Calvin 6/6
LA1OEA/VE6NOR |available | Opinions are mine, not my employer's,
trond@phys.ucalgary.ca |via finger| and may change without notice. Uffda.

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Institute for Space Research |Public PGP| "It is Finished" -God, approx. 32AD
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LA1OEA/VE6NOR |available | Opinions are mine, not my employer's,
trond@phys.ucalgary.ca |via finger| and may change without notice. Uffda.

68. problems with BacPac modem and software

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-04 19:45:35 UTC
From: ddrk_ltd@uhura.cc.rochester.edu
Message-ID: <1993Aug4.194535.18455@galileo.cc.rochester.edu>
Source record: 51807
Cross-posted to: rec.radio.amateur.packet,rec.radio.amateur.digital.misc

I have a BayPac modem that works fine with the testing software that comes
with it, but doesn't transmit when used with a terminal program like
baycom 1.4, 1.5. In baycom, i think it receives fine (in my area I can't
receive any packet, yet) but when there is noise, the indicator on the
left hand side goes from QRV to RECV, but when I set the program to
:beacon 1, on screen it transmits, but my radio's xmit lite doesn't light
up. Is it a software problem? What can I do?
Please help soon!

Thanks in advance,

Dave, N2RQU
--

David J Dorkin, N2RQU

Voice: (516)239-2959

69. Re: oking for gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-04 20:09:51 UTC
From: M16616@mwvm.mitre.org
Message-ID: <16C20E34F.M16616@mwvm.mitre.org>
Source record: 51810

Good question. I haven't seen anythng SPECIFIC about HAM RADIO PACKET to/from the INTERNET yet. (i.e. what hardware, software, success/failure stories, other techincal details)

70. Internet <==> Packet (Mail & Files)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-04 21:35:24 UTC
From: johnr@nx58.mik.uky.edu
Message-ID: <johnr.744500124@mik.uky.edu>
Source record: 51808

I have heard that there are several internet to packet mail gateways, however when I was reading the threads about the McGill FTP site some dude said that there was lots of that type stuff on packet. So how would a non-TNC-owning person like myself get access to this. Also, if anyone knows how to do the mail gateway thing I would appreciate them telling me.

Thanks,
Your Pal,
John
--
-=+ John S. Roberts, Jr. Work: (606) 257-2275 Home: 272-1417 +=-
-=+ McVey Hall Room 100 FAX/Data/Voice Mail: 272-7105 +=-
-=+ University of Kentucky Telnet: love.slip.uky.edu login: guest +=-
-=+ johnr@f1.facts.uky.edu Ham: KD4UBM Dod: 727 '85 Shadow 500cc +=-

71. have baycom but have bad diskette

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-05 04:17:52 UTC
From: MARK@ardsley.business.uwo.ca
Message-ID: <MARK.323.744524272@ardsley.business.uwo.ca>
Source record: 51809

I recently picked up a baycom tnc. The disk is screwed. Instead of myself tracking down a replacement, is there someplace that I can grab files via ftp?

=-=-=-

72. Re: oking for gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-05 07:58:54 UTC
From: cerdini@cismhp.univ-lyon1.fr
Message-ID: <23qeju$ko5@cismsun.univ-lyon1.fr>
Source record: 51811

M16616@mwvm.mitre.org wrote:
: Good question. I haven't seen anythng SPECIFIC about HAM RADIO PACKET to/from
: the INTERNET yet. (i.e. what hardware, software, success/failure stories, other
: techincal details)

If it can help you, I have an old file which explain the use of a gateway
between Internet and Packet Radio :

o /
---x----- cut here --
o \

From: david@stat.com (David Dodell)
Newsgroups: rec.radio.amateur.packet
Subject: Re: Packet <=> Internet Gateways
Date: Sun, 11 Jul 93 09:10:22 MST
Distribution: world
Organization: Stat Gateway Service, WB7TPY

djk@crash.cts.com (Daniel J. Karnes) writes:

How to Use the WB7TPY
Packet <-> Internet Gateway

First, some brief operational notes:

(1) Messages must not contain any foul language, or commercial purpose.
(2) Messages can only be sent to countries that the United States has
a third-party agreement. All others will be destroyed.
(3) Messages from the internet should be less then 5K in length.
No files should be sent.
(4) If you have questions, please do not hesitate to contact me either on
packet radio: WB7TPY@WB7TPY.AZ.USA.NA -or-
Internet : david@stat.com -or-
Fidonet : David Dodell @ 1:114/15

(5) Have fun. Use the gateway as much as you like. That is what it is
there for.

From Internet to Packet

Send mail to the internet address of:

gate@wb7tpy.ampr.org

The first line of text must contain a full packet address, preceded with the
word "Packet:"

For example, mail to my packet address, would have the first line of text;

Packet: wb7tpy@wb7tpy.az.usa.na

From Packet to Internet

Send as private mail (never a bulletin) to the packet address of:

gate@wb7tpy.az.usa.na

The first line of text must contain a full domained internet address,
proceeded with the word "Internet:"

For example, mail to my internet address, would have the first line of text;

Internet: david@stat.com

Internet: david@stat.com FAX: +1 (602) 451-6135
Bitnet: ATW1H@ASUACAD FidoNet=> 1:114/15
Amateur Packet ax25: wb7tpy@wb7tpy.az.usa.na

o /
---x----- cut here --
o \

--
Michel CERDINI BP5574 69247 Lyon Cedex 05 | E-Mail cerdini@cism.univ-lyon1.fr
BBS/RTC Videotex ZENITH (8 acces) 24h/24 | AX25 F1ITS@FF2LY.FRHA.FRA.EU
Minitel: 7836.1996 - V32b/V42b: 7836.1001 |AmprNet F1ITS.AMPR.ORG [44.151.69.10]

73. Want apple II communications software

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-05 13:55:14 UTC
From: jwl@ferrari.cray.com
Message-ID: <1993Aug5.085514.27938@walter.cray.com>
Source record: 51812

I have a friend that would like to get into packet/digital
and has an apple II. Before he buys a tnc he was wondering
if there was any software that he could buy or is available
for the apple that might support one or another of the
tnc's better than another. I looked at ftp.apple.com, but all
their stuff seems to be Mac oriented.

Does anyone know of such software available today?

Thanks,
Jim.

--

Jim Lynch, Sales Analyst, Cray Research, Inc. / ARS: K4GVO
Southeast District, Phone: (404) 631-2254, Email: jwl@sedist.cray.com
Suite 270, 200 Westpark Drive, Peachtree City, GA 30269

74. Re: have baycom but have bad diskette

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-05 15:22:26 UTC
From: raymonda@uranium.EBay.Sun.COM
Message-ID: <23r8ji$6i@male.EBay.Sun.COM>
Source record: 51813

In article 744524272@ardsley.business.uwo.ca, MARK@ardsley.business.uwo.ca (Mark_Bramwell) writes:
.>I recently picked up a baycom tnc. The disk is screwed. Instead of myself
.>tracking down a replacement, is there someplace that I can grab files via
.>ftp?
.>
.>=-=-=-

75. Re: PacketCluster in Cor

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-05 16:57:06 UTC
From: Burt.Kaufman@f40.n382.z1.fidonet.org
Message-ID: <744595237.AA00049@afarm.uucp>
Source record: 51745

-=> Quoting Scott A Stembaugh to All <=-
SAS> A friend of mine just moved to Corpus Christie, TX and is having
SAS> problems finding a DX PAcketCluster in the area. If you know of one, or
SAS> even a BBS, please forward the freq and call to me.

I have these 3 frequencies for Packet in Corpus Christi:
145.010 - N5JKH-3
145.050 - N5IUT, TEXNET
445.100 - KB5GD, TEXLINK

Burt, N5SYY

... Vote Picard/Riker '96
___ Blue Wave/QWK v2.12

76. Need IBM s/w to talk to a multimode controller

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-05 17:28:02 UTC
From: mebly@eng.umd.edu
Message-ID: <23rfv2INN82q@mojo.eng.umd.edu>
Source record: 51814

I'm looking for a public domain or shareware terminal program for the IBM PC to use with a multimode controller for PACKET/AMTOR and RTTY.

Yes, I know any terminal emulator will work but I'd like to find a program with features like split windows for send/receive, etc.

I have a list of programs for the Mac but not the IBM.

If you have any information or suggestions, please let me know via e-mail. If there is sufficient information, I will post a summary.

Thanks and 73.

--
Mark Bailey KD4D Motto: Life's too short to drink cheap beer.
mebly@eng.umd.edu Disclaimer: I didn't really say this.

77. Re: Automatic Packet Reporting System

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-05 17:38:57 UTC
From: kohjin@marina.prug.or.jp
Message-ID: <CBAroy.6AB@marina.prug.or.jp>
Source record: 51817

In article <1993Aug4.161304.9449@aplcen.apl.jhu.edu> jeg@ddsdx2.jhuapl.edu (John Grimes x6325) writes:
>In <23movf$ot6@male.EBay.Sun.COM> raymonda@uranium.EBay.Sun.COM (Ray Anderson) writes:

[partly deleted...]

>
>Greetings Ray,
>
> I have uploaded APRS to two sites on the net:
>
>ucsd.edu, don't know if its been posted yet.
>
>rahul.net /pub/davidj/radio directory, file name: aprs114.zip and is avail. for anonymous ftp.
>
> 73, John kd3wy

I've just downloaded it from rahul.net, thanks!
It's in a que of uploading to KO-23.

73, Kohjin

--
----/---- Kohjin Yamada, JR1EDE [kohjin@marina.prug.or.jp]
Q-----T------H 504-55 Shimo-Yamaguchi, Hayama, Miura, Kanagawa, Japan
------/|------- Phone:+81-468-75-6750 Fax/Modem/Voice:+81-468-76-1176

78. Program Necessary?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-05 23:34:48 UTC
From: j.tatum@genie.geis.com
Message-ID: <9308052334.AA24361@relay2.geis.com>
Source record: 51815

What is the point of programs such as KA9Q when the FAQ says most TNC's need nothing more than a terminal emulator?

Also, I am interested in the prospect of TCP/IP over Packet Radio. A way to 'cheat' at it would be to use KA9Q's mailbox thing and two connections (the packet radio and a SLIP connection) to enable other users to telnet. Is this feasable? While reading the KA9Q docs I was under the impression that this was part of the AX.25 protocol.

Jamie

79. Re: Program Necessary?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-06 01:49:28 UTC
From: winter@apple.com
Message-ID: <23sdb8$6ob@apple.com>
Source record: 51816

In article <9308052334.AA24361@relay2.geis.com> j.tatum@genie.geis.com writes:
>What is the point of programs such as KA9Q when the FAQ says most TNC's need
>nothing more than a terminal emulator?

Depends what you want to do. If you only want to log onto a packet
BBS and read mail and messages, a dumb terminal program is fine.

If you want more power, you turn control over to a computer instead
of the TNC. With the KA9Q program on my Macintosh, I can use all
the standard TCP/IP applications (FTP, SMTP, Finger, etc.), have
multiple sessions going simultaneously in multiple windows (right now
one window is available for commands and the other is tracing activity
on the local TCP/IP frequency), and just generally do a lot more
than I could with terminal programs and AX.25 PBBSs. (Of course,
the KA9Q software also supports AX.25 and NET/ROM, so you can still
do those, too.)

Patty

--

::
:: Patty Winter (Apple contractor) Internet: winter@apple.com ::
:: Sunnyvale, California Amateur radio: N6BIS AMPRNet: 44.4.4.50 ::
::

80. Computer Terminal DatMax Barnd model (DMX-1100)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-06 03:53:28 UTC
From: saud@seas.gwu.edu
Message-ID: <1993Aug6.035328.5115@seas.gwu.edu>
Source record: 51818

********FOR SALE *********

Terminal for sale

DataMax
Model: DMX-1100 system

Made by
DataMaxx USA Corporation
Tallahasse FL 32314

Make you offer.

(703)845-8791

or send me a mail msg

Thanks

81. Types of gateways (was Re: Internet <-> packet gateway near)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-06 18:01:01 UTC
From: winter@apple.com
Message-ID: <23u68t$f1j@apple.com>
Source record: 51819
Cross-posted to: rec.radio.amateur.packet,rec.radio.amateur.digital.misc

In article <CBCBs7.oH3@hawnews.watson.ibm.com> kf5mg@vnet.ibm.com (Jack Snodgrass) writes:
> First of all, there are two different type of Internet/Packet gateways.
>1). Email Gateway.
> This allows AX.25 BBS users to send mail to Internet Users and
> vice versa.
>2). Internet/Ampr.Org. Gateway.
> This allows a packet radio operator to talk to other packet radio
> operators real time using the Internet as a gateway between sites.

Jack, thanks for posting this clarification. It is easy to get
confused because the term "gateway" is used for both situations.

I just discovered the Peninsula Internet/AMPRnet gateway a couple
of days ago. It's great fun! Just a couple of minutes ago, I sent
a message from winter@apple.com to n6bis@n6bis.ampr.org; I set the
verbose flag on the outgoing message and have trace running on my
packet station, so I was able to watch both sides of the SMTP
session! Pretty nifty.

I also had direct SMTP sessions with AMPRnet and regular-Internet
sites in Texas, Massachusetts, and southern California.

Note that all of my connections to non-AMPRnet sites were to
licensed hams, so when they respond, it will be a ham initiating the
transmission on amateur radio. I don't know what other people are doing
about this, but I intend to restrict my use of the gateway to only
contacting other hams.

> I'm more familiar with the Internet/Ampr.Org. type gateway. For that,
>you need a PC with a physical connection to the Internet (not a UUCP
>link) and a physical connection to a packet station. Generally, you
>have a either a SLIP or lan connection to the Internet and one (or more
>) tnc/radios connected to your gateway.

Just to make this clear--this is what you need to *set up* such a
gateway. To *use* it, you only need a simple amateur TCP/IP packet
station.

>to a NOS gateway using a standard ax.25 connect and then send an
>Email message to an Internet users, but you can't forward mail from
>an ax.25 style bbs through a Internet Gateway to an Internet user
>easily.

Maybe not with NOS, but Bob Arasmith's own software is handling
this situation excellently.

73,
Patty

--

::
:: Patty Winter (Apple contractor) Internet: winter@apple.com ::
:: Sunnyvale, California Amateur radio: N6BIS AMPRNet: 44.4.4.50 ::
::

82. Packet software for Amiga

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-08 18:22:04 UTC
From: jdc3538@ultb.isc.rit.edu
Message-ID: <1993Aug8.182204.24178@ultb.isc.rit.edu>
Source record: 51820

What packet radio software is available for the Amiga? Any hints,
tips or pointers to FTP sites are appreciated.

Thanks...Jim
N2VNO

83. Re: Packet software for Amiga

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-08 20:32:07 UTC
From: jdc3538@ultb.isc.rit.edu
Message-ID: <1993Aug8.203207.24688@ultb.isc.rit.edu>
Source record: 51821

Sorry for leaving out important details. I'm seeking Amiga packet
software for modem-only TNC's like Baycom or Digicom.

Thanks...Jim
N2VNO

84. RE packet BBS too fast for RLIBBS

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-08 21:55:49 UTC
From: enge@almaden.ibm.com
Message-ID: <19930808.145551.214@almaden.ibm.com>
Source record: 51822

A number of complaints of come in regarding duplicates during an REBBS to RLIBBS forwarding session using BETA test version 2.1J, The problem shows up as the following:

REBBS sends RLIBBS sends

[sid] [sid]
SB whatever >
subject OK
data
ctl-Z
F>

*** Link disconnect ***

Note that the final prompt (>) is missing from the RLI side. It only occurs when the RLIBBS has nothing to send.

This seems to be because I now send the ctl-Z and the "F>" prompt in the same packet. It looks like the RLIBBS sends the prompt but the disconnect happens before the packet is sent and the TNC or whatever discards the packet.

There will be a special option in the next BETA version to slow down for RLI systems.

Roy

85. How to set deviation

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-09 00:34:15 UTC
From: bills@inqmind.bison.mb.ca
Message-ID: <sRoZ8B3w165w@inqmind.bison.mb.ca>
Source record: 51823

Anyone built the deviation meter in "73" and compared it with a
"pro" deviation meter ? I bought the issue after seeing several
mentions on Internet - it just looks like a peak detector. In curiosity
I hooked up a scope to the discriminator of my TR7400 that I use for
packet work. There's some very strange looking tones out there;
at least one station (that I can't copy even though he's S9 at
my location) appears to be transmitting a near-square wave instead o
of the usual sinusoids. My local packet BBS also has what looks like
a distorted waveform as well. Could *both* these veteran operators be
over-deviating, or do I have some kind of problem at my end ? Other
stations, that don't sound so distorted, have lower-amplitude but
"rounder" looking sinusoids than these two.
Bill
(who's going to crank down his TX audio and see if that helps with
connecting to the local BBS at all....)

bills@inqmind.bison.mb.ca
The Inquiring Mind BBS, Winnipeg, Manitoba 204 488-1607

86. Software for PK232

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-09 08:00:29 UTC
From: cerdini@cismhp.univ-lyon1.fr
Message-ID: <24506t$f26@cismsun.univ-lyon1.fr>
Source record: 51824

I have a PK232 US model, and I want to open more than one session when
I'm connected to an host computer... If I use a normal terminal emulator,
all messages are written on the same screen...

That's why I'm looking for something which can open several windows, in
which is written messages of each sessions... Is it clear ?! :)

So, what can I use ?

73' to all
--
Michel CERDINI BP5574 69247 Lyon Cedex 05 | E-Mail cerdini@cism.univ-lyon1.fr
BBS/RTC Videotex ZENITH (8 acces) 24h/24 | AX25 F1ITS@FF2LY.FRHA.FRA.EU
Minitel: 7836.1996 - V32b/V42b: 7836.1001 |AmprNet F1ITS.AMPR.ORG [44.151.69.10]

87. Moonbounce or meteor scatter, which is easier ?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-09 08:40:23 UTC
From: youngqud@ucs.orst.edu
Message-ID: <2452hn$ed@gaia.ucs.orst.edu>
Source record: 51825
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.space,rec.radio.amateur.misc

I've become interested in sending VHF signals between Corvallis, Oregon
and Everett, Washington. Of course, these 2 points are out of range
of each other for conventional point to point VHF signals. If I
were to focus on moon bounce or meteor scatter propagation, which
do you suppose would be easier to acomplish ?

youngqud@ucs.orst.edu Dean Youngquist
N7LPE youngqud@ucs.orst.edu
428 N.W. 9th Street Corvallis, Oregon 97330

88. GB2ATG British Amateur Radio Teledata Group Bulletin

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-09 15:11:00 UTC
From: IKENDALL@university-of-humberside.ac.uk
Message-ID: <rec-radio-info_744938271@unomaha.edu>
Source record: 51832
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,uk.radio.amateur,rec.radio.info

RYRYRY - GB2ATG - RYRYRYRYRY - BARTG - RYRYRYRYRY - GB2ATG - RYRYRY

This is the - British Amateur Radio Teledata Group - News Broadcast
Service for all Amateurs and Short Wave Listeners interested in RTTY
and AMTOR.

This news is broadcast during the first full week commencing Monday
each month, to the following schedule..

Evening transmissions at 1930 GMT. on 3.584 MHz. mark.
RTTY on Monday-AFSK, Wednesday-AFSK, Friday-FSK and Saturday-AFSK.
AMTOR/FEC on Tuesday and Thursday.

Morning transmission at 1000 GMT. on 7.041 MHz. mark.
RTTY on Sunday-AFSK.

Stated frequencies could be plus or minus for QRM.

News for August 1993. Bulletin No. 008. (all times are GMT).

BARTG Information.

News bulletins are now available on the Packet network as a
BARTG.GBR file thanks to Andy (G3ZYP) @ GB7BBS.#28.GBR.EU.
Bulletins are also posted on the "INTERNET" system via the INFO-HAMS
list on UCSD.EDU thanks to Iain (G6ARO) who can be contacted as
Iain@HUMBER.AC.UK
Access reports would be a welcome aid to making the news available
to all with full UK coverage on the HF and VHF bands.

BARTG rally takes place on Sunday September 12th from 10:30 (BST) at
the Sandown Exhibition Centre, Esher, Surrey. 10 minutes drive from
the M25. J10. All the latest in Data modes and computing plus Bring
and Buy. Hot and cold refreshments and BAR on site.
Volunteer stewards required, if you can help, please ring..
Rally Manager Peter Nicol (G8VXY) 021 453 2676.

DX. Activity RTTY.
---
14 MHz.
TI2KSR AND VP5JM 0400, V51GB 0630, 9H1ET 0830, OM3TLU 0900,
YI1AL 1300, 9V1JY 1330, A45ZX AND 5B4VX 1400, VU2RAK 1430,
VR2GC 1530, 3C1TR 1830, Z32GX 1930, TA7M 2000, FY5FJ 2030,
FP4EK 2100, ZD8DEZ 2130, ZP6XT 2200.

21 MHZ.
BT2000BJ 0900, 9A1CRT 1030, YI1AL 1230, OM3ZJW 1300, A71CW 1330,
V51GB 1600, 4S7RV 1630, ZS9A 1645, 3C1TR 1700,

AMTOR ARQ
14 MHZ. HK5HRN 0630, VU2RAK 1800, FY5FJ 2030.
21 MHZ. CE3CWF 1600.

QSL Information..

FP4EK via K1RH
VP5JM via W3HNK
S21A via W4FRU
3C1TR via K8JP
9K2ZZ via W8CNL
4N5GBC and Z32GX via YU5GBC
7Z1IS via OE6EEG
FR5ZU/G via VE2NW
C91AI via CT1DGZ
ZS9A via ZS1IS.
BT2000BJ via BY1QH
OM3ZJW via OK3JW
V31BR via N5FTR.
9A1CRT at Box 564, 41000 Zagreb, Republic of CROATIA.

Contests.

The CQ World Wide RTTY contest takes place from 0000 September 25
until 2400 September 26. on all 5 HF bands. All digital modes may be
used, Baudot, ASCII, Amtor (FEC and ARQ), Packet (no unattended
operation or contacts through Gateways or Digipeaters).
A station may only be worked once per band to score regardless of
the digital mode employed. The same station may be worked on other
bands for additional points.

Classification..
1. Single operator, all band and single band.
2. Single operator assisted.
3. Multi-operator, single transmitter.
4. Multi-operator, multi-transmitter (all band entries only).

Categories are...
A) All band.
B) Single band.
Single operator assisted and multi-operator entries can only enter
the all band section.
Total contest period is 48 hours but not more than 30 hours of
operation are permitted for single operator stations. The 18 hours
of rest can be taken at any time during the contest in periods not
less than 3 hours each which must be clearly marked in the log and
summary sheets.
Multi-operator and multi-multi stations may operate the entire 48

hours contest period.
Exchange message within the 48 continental United States is RST and state or VE area plus CQ zone number.
All other stations exchange RST and CQ zone number.
QSO points: One (1) QSO point for contacts within your own country. Two (2) QSO points for contacts outside your own country but within your own continent. Three (3) QSO points for contacts outside your own continent.
Multiplier points are: (1) point for each US state (48) and each Canadian area (13) on each band. (1) point for each DX country on each band. KH6 and KL7 count as DX countries but not states.
USA and Canada count as countries for the first contact on each band. (1) point for each CQ zone (40) on each band.
Final score: Total QSO points times total multipliers.
Logs must be post-marked no later than November 30 to qualify.
To Ron Gould, KT1N, CQ WW RTTY DX Contest Director, P.O.Box DX, Stow, MA 01775, USA.

Notes of Interest.

Belize (V3). Will be active with RTTY again as V31BR from August 9 to 16.

Saint Paul Isl. (CY9). Will be active as CY9CWA with some RTTY from August 9 to 12.

Eritrea (E3). This recently reinstated DXCC country will be activated by JH1AJT, DJ9ZB and K5VT during the first or second week in August, RTTY included. Eritrea was deleted as a separate DXCC country 14/11/1962 but is now an independent state from May 24 1993.
Penguin Isl. (ZS1). James DJ0WQ plus DK2WH, DJ4LK and DJ2ZS will sign ZS0PI from July 28 until August 4. DJ0WQ and DJ2ZS will then move to Walvis bay (ZS9) from August 6 to 28 with RTTY promised from both locations.

Pratas Isl. (BV9). Delayed operations from this new DXCC country are now expected early August. Look for BV9P.

Belau (KC6). Kyoto ARC members are mounting a major all band all mode operation including RTTY from August 8 to 13.

Anguilla (VP2E). John KA3DBN will be active on all bands as VP2EBN from August 22 to 30 with RTTY promised.

Kampuchea (XU). PA3DWC is now active as XU3DWC until he leaves in September. He has been worked on 20M. RTTY.

Thanks this month to..
G3ZYP, DXNS, VK2SG RTDX, ARRL ARLD, OPDX/BARF80.

Copy of the news as distributed by Bob G0ARF.

BARTG caters for all DATA interests with information-components-kits -ready built units and software from experts. Members receive a 120 page quarterly journal devoted to data modes. Beginners guides for most data modes are available. The group sponsors HF and VHF RTTY contests, administers its own DX and members award scheme and runs an annual rally.

This copy of BARTG News is posted by Iain Kendall (G6ARO) who can be contacted via Internet e-mail at.. iain@humber.ac.uk
Items for inclusion in the broadcast may also be mailed to this address, as well as any queries regarding membership or services offered by BARTG.

89. Re: Moonbounce or meteor scatter, which is easier ?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-09 16:32:14 UTC
From: glenne@sad.hp.com
Message-ID: <CBI39r.7qA@srgenprp.sr.hp.com>
Source record: 51826
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.space,rec.radio.amateur.misc

Dean Youngquist (youngqud@ucs.orst.edu) wrote:
: I've become interested in sending VHF signals between Corvallis, Oregon
: and Everett, Washington. Of course, these 2 points are out of range
: of each other for conventional point to point VHF signals. If I
: were to focus on moon bounce or meteor scatter propagation, which
: do you suppose would be easier to acomplish ?

Dean,

I've done both and meteor scatter is far easier. In fact, with a low
to moderate gain antenna and 100-200 watts you may very well be able to
find enough to scatter your signal from to allow you to work "direct".
They may not be as "out of range" as you think. I've worked British
Columbia as well as Tacoma on meteor scatter more than once. I believed
I worked VE7ANP years ago on routing meteor schedules when he was
running only 100 watts.
I suspect that with high power and reasonable antennas on 6M that you
could work it pretty reliably, perhaps even all the time on SSB. The
"6M early morning crowd" has used troposcatter which is enhanced by extra
meteor activity to work up and down the west coast (at least). I don't
know if they are still active on weekend mornings or not.

Getting a station that can hear its own echos from the moon is a lot
more work (but fun).

73
Glenn Elmore n6gn

N6GN @ K3MC
amateur IP: glenn@SantaRosa.ampr.org
Internet: glenne@sr.hp.com

90. Re: How to set deviation

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-09 16:48:13 UTC
From: gary@ke4zv.uucp
Message-ID: <1993Aug9.164813.7960@ke4zv.uucp>
Source record: 51828

In article <sRoZ8B3w165w@inqmind.bison.mb.ca> bills@inqmind.bison.mb.ca (Bill Shymanski) writes:
>Anyone built the deviation meter in "73" and compared it with a
>"pro" deviation meter ? I bought the issue after seeing several
>mentions on Internet - it just looks like a peak detector. In curiosity
>I hooked up a scope to the discriminator of my TR7400 that I use for
>packet work. There's some very strange looking tones out there;
>at least one station (that I can't copy even though he's S9 at
>my location) appears to be transmitting a near-square wave instead o
>of the usual sinusoids. My local packet BBS also has what looks like
>a distorted waveform as well. Could *both* these veteran operators be
>over-deviating, or do I have some kind of problem at my end ? Other
>stations, that don't sound so distorted, have lower-amplitude but
>"rounder" looking sinusoids than these two.

Sure Bill, both of these "veterans" could be over-deviating. In fact I'd venture that a *majority* of packeteers over-deviate. While they may be veterans with computers and bbs operation, they may not be RF whizzes, and may never have looked at their output with a communications monitor, or even another receiver and scope as you have. The square waves you describe are the typical result of over-deviation.

Gary

--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

91. Re: Moonbounce or meteor scatter, which is easier ?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-09 17:21:07 UTC
From: garym@alsys.com
Message-ID: <1993Aug9.172107.3936@alsys.com>
Source record: 51827
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.space,rec.radio.amateur.misc

In <2452hn$ed@gaia.ucs.orst.edu> youngqud@ucs.orst.edu (Dean Youngquist) writes:
>I've become interested in sending VHF signals between Corvallis, Oregon
>and Everett, Washington.
>... If I
>were to focus on moon bounce or meteor scatter propagation, which
>do you suppose would be easier to acomplish ?

I'm not sure of the distance between those two points but how about
tropo-scatter? That might be even easier for the distance involved but
I don't know if it works at VHF, I've only used it on UHF (2-4 Ghz).
--GaryM
--
Gary Morris KK6YB Internet: garym@alsys.com
San Diego, CA USA Phone: +1 619-457-2700 x128 (work)

92. Re: Looking for Digicom64

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-09 18:12:16 UTC
From: tcline@hplvec.LVLD.HP.COM
Message-ID: <116230001@hplvec.LVLD.HP.COM>
Source record: 51746

> In rec.radio.amateur.digital.misc, tomg@capella.cup.hp.com (Tom Graham) writes:
>
> I am looking for an ftp site for digicom for Commodore-64. Any leads?
>
> Tom Graham N6WLF tomg@cup.hp.com
> Hewlett-Packard Cupertino, CA

I was told:
> Digicom 64 in the August 1986 73 (date ??).
>
> The software is public domain and is usually bundled with a
> "kit," PCB, hard-to-find parts, etc.; from some hams that
> translated the original documentation from the German.
>
> A more-or-less accurate list of the guys that can supply the kit
> is listed in the ARRL publication, "Gateway to Packet Radio."

I have seen this ad:
Digicom for Commodore 64 (Nuts + Volts, Feb 93, p11):
Crawford Amateur Radio Society
R.D. #1, Box 101
Guys Mills, PA 16327
$49 + $4 shipping
Catalogue $1

Hope this helps!

73

Ted Cline, N0RQV
ted_cline@hpisla.lvld.hp.com
VOICE: (303) 679-2352

93. Re: have baycom but have bad diskette

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-09 19:38:23 UTC
From: youngqud@UCS.ORST.EDU
Message-ID: <24693f$372@gaia.ucs.orst.edu>
Source record: 51829

Mark_Bramwell (MARK@ardsley.business.uwo.ca) wrote:
: I recently picked up a baycom tnc. The disk is screwed. Instead of myself
: tracking down a replacement, is there someplace that I can grab files via
: ftp?
:
There is something you can try with the disk. Sometimes a disk will
be bad in one drive but barely readable in another drive. If its a 360
K floppy it may have been written using a 1.2 Meg floppy, which sometimes
will not be readable when you put it back to a 360K drive. -Dean

94. INTERNET PACKET GATEWAY

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-09 20:54:34 UTC
From: M16616@mwvm.mitre.org
Message-ID: <16C25EDCA.M16616@mwvm.mitre.org>
Source record: 51830

Is there an INTERNET PACKET gateway on the East Coast USA similar to N0ARY? .

95. Re: Moonbounce or meteor scatter, which is easier ?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-09 20:59:58 UTC
From: dave@llondel.demon.co.uk
Message-ID: <744955198snx@llondel.demon.co.uk>
Source record: 51834
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.space,rec.radio.amateur.misc

In article <2452hn$ed@gaia.ucs.orst.edu> youngqud@ucs.orst.edu (Dean Youngquist) writes:
> I've become interested in sending VHF signals between Corvallis, Oregon
> and Everett, Washington. Of course, these 2 points are out of range
> of each other for conventional point to point VHF signals. If I
> were to focus on moon bounce or meteor scatter propagation, which
> do you suppose would be easier to acomplish ?
The position of the moon probably has a lot to do with it..... like if it is
below the horizon you might find moonbounce difficult :-)

If you want to try MS then I suggest 6M is a good band to look at because
even just listening to a DX beacon frequency you can hear all sorts of
meteor pings, some of which last quite a while.

Dave

****
* G4WRW @ GB7WRW.#41.GBR.EU AX25 * You think *you* have problems? *
* dave@llondel.demon.co.uk Internet * What do you do if you *are* *
* g4wrw@g4wrw.ampr.org Amprnet * a manically depressed robot?? *
****

96. For Sale MFJ-1224 (CW & Ritty)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-09 22:15:54 UTC
From: szhall@ursula.ucdavis.edu
Message-ID: <CBIJ6J.4Bt@ucdavis.edu>
Source record: 51831

I have a MFJ-1224 for sale-It can send CW and Ritty as well as receive, I have the manual, Software and cables..This is for HF...Make Offer..Jeff

97. Meteori scatter and Troposcatter

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-10 00:08:10 UTC
From: tjonz@caliban.Corp.Sun.COM
Message-ID: <246ota$971@jethro.Corp.Sun.COM>
Source record: 51833
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.space,rec.radio.amateur.misc

youngqud@ucs.orst.edu (Dean Youngquist) writes:

> I've become interested in sending VHF signals between Corvallis,
> Oregon and Everett, Washington....If I were to focus on moon bounce
> or meteor scatter propagation, which do you suppose would be easier
> to acomplish ?

glenne@sad.hp.com (Glenn Elmore) replies:

> I've done both and meteor scatter is far easier.

It sounds like Dean is looking for a reliable path, and Glenn recommends meteor scatter, which surprised me. I had the impression that meteor scatter was a very occasional thing, like when the Persieds or Leonids were in town. Is this not the case? If I were to work nothing other than meteor scatter, how many hours would I be able to work during and "average" week? Glenn continues:

> The "6M early morning crowd" has used troposcatter which is enhanced
> by extra meteor activity to work up and down the west coast

Troposcatter? Is this what happens when little bits of tropo re-enter the atmosphere? (:^) Seriously, this is a new term to me. Are troposcatter and troposheric ducting related? How about sporadic E? As I recall from junior high school science class, the troposephere is the lowest layer of the atmosphere. I also seem recall reading that the curent theory about the source of sporadic E skip is clouds of ionized particles produced when two large air masses rub against one another during wind shear conditions. Is this the same as troposcatter? Is it also more common than I expect? From Glenn's description of the 6M crowd, it would appear so.

Todd, KB6JXT

98. Re: Need IBM s/w to talk to a multimode controller

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-10 06:54:17 UTC
From: cfm1471@ucs.usl.edu
Message-ID: <1993Aug10.065417.13772@usl.edu>
Source record: 51835

In article <23rfv2INN82q@mojo.eng.umd.edu> mebly@eng.umd.edu (Mark E. Bailey) writes:
>I'm looking for a public domain or shareware terminal program for the IBM
>PC to use with a multimode controller for PACKET/AMTOR and RTTY.
>
>Yes, I know any terminal emulator will work but I'd like to find a program
>with features like split windows for send/receive, etc.
>
>I have a list of programs for the Mac but not the IBM.
>
>If you have any information or suggestions, please let me know via e-mail.
>If there is sufficient information, I will post a summary.
>
>Thanks and 73.
>
>
>--
>Mark Bailey KD4D Motto: Life's too short to drink cheap beer.
>mebly@eng.umd.edu Disclaimer: I didn't really say this.

Lan-Link, available on uscd.edu.

Charlie

Charles Morrison KI5XP Internet: ki5xp@ucs.usl.edu
U. of Southwestern La. Internet: cfm1471@ucs.usl.edu
Lafayette, La. 70506 Packet: KI5XP@K5ARH.LA
(318) 988-3821

****** Field Day (2A): W5DDL #2 in 92, #1 in '93 ******

99. Re: Meteori scatter and Troposcatter

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-10 18:03:18 UTC
From: paulf@Csli.Stanford.EDU
Message-ID: <1993Aug10.180318.29231@Csli.Stanford.EDU>
Source record: 51836
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.space,rec.radio.amateur.misc

tjonz@caliban.Corp.Sun.COM (Todd Jonz) writes:

>It sounds like Dean is looking for a reliable path, and Glenn recommends
>meteor scatter, which surprised me. I had the impression that meteor scatter
>was a very occasional thing, like when the Persieds or Leonids were in town.
>Is this not the case? If I were to work nothing other than meteor scatter,
>how many hours would I be able to work during and "average" week?

Well, now that all depends on a number of factors. If you rely on shower
meteors (known in the MBC world as "overdense"), then you're correct, the
time between pings is quite long. Most MBC systems, however, rely on
underdense meteors, which are the result of collisions with cosmic dust, and
which are far more frequent (10^14 per day). The exact equations are in
the CCIR Green Books.

--
-=Paul Flaherty, N9FZX | "The National Anthem has become The Whine."
->paulf@Stanford.EDU | -- Charles Sykes, _A Nation of Victims_

100. FWD: DSP filters and desired features

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-10 23:41:28 UTC
From: slp9m@cc.usu.edu
Message-ID: <1993Aug10.174129.71014@cc.usu.edu>
Source record: 51837
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment

Dear DXer and Contester Users and Potential Users of DSP filters,

(If someone could post this on any other appropriate reflectors
(other than CQ-CONTEST reflector), I would appreciate it.)

I have had a JPS NIR-10 filter since the product first came out. I have
not yet upgraded to the latest firmware, but feel that its best feature
is the automatic removal of multiple carriers. At Dayton this year I
purchased a Timewave Technology DSP-59. I was very impressed with its
automatic removal of carriers as well as its noise reduction and LP/HP
filter capability, and of its intuitive control operation, especially
the "aggressiveness of the correlation function" adjustment.

I have also been one of the beta sites for the Digital Interactive
DSP-120 filters. Comparing it to the others is a classic apples and
oranges comparison. The DSP-120 has digital record and playback on
the host computer (which it requires for many of its functions and
the other filters do not use a host computer), as well as a graphics
screen display on your computer for filter selection and changing,
and a time domain and frequency domain display. Because of the DSP-120s
wide range of features and computer interface it is somewhat more
difficult to master than the other two which have only knobs and switches
(especially in a contest on Sunday at 4 a.m. local or anytime when the QSO
rate is high). But the DSP-120 lacks the capability of automatic reduction
of multiple carriers that I find quite useful on phone. (In fact my normal
operation involves leaving any DSP engine in the automatic removal mode
for all general operating.) (When the Timewave Technology DSP-59 is switched
to carrier removal mode and it is used on CW, its operation is so fast that
only the leading edges of the dots and dashes get through -- very impressive.)
(The Digital Interactive DSP-120 has an adaptive filter function that when
turned on integrates the spectral components over whatever time you let it
run and designs a matched filter that corresponds to the individual's voice
to which it was listening -- impressive indeed.)

The designer of the DSP-120 is not an amateur radio operator (the filter has
a number of non-ham applications) and relys on feedback from users for adding
and prioritizing new features. I feel that the automatic removal of carriers
is an important feature, maybe even a fundamental feature, and that the lack
of this capability reduces the usefullness (and marketability) of the DSP-120.

So, I am requesting any input from both users of DSP filters as well as
potential users regarding usefullness of various functions on the
currently available filters, as well as a "wish list" for features to
be included in the next generation of DSP filters. Especially interested
in "correlation function" types of filtering, where highly correlated

signals (such as carriers) are rejected, low correlation signals (such as noise) are rejected, and moderately correlated signals (such as voice) are passed through.

Reply to me directly or via the reflector as appropriate (per Trey's guidelines). I am at broz@csn.org

Thanks for the input! John Brosnahan W0UN
--
forwarded to USENET by...

Scott E. Parker WA7VYJ
Center for Atmospheric and Space Sciences
Utah State University Logan, UT 84322-4405
Internet: sparker@coquina.cass.usu.edu sparker@cedar.hao.ucar.edu
Twisted pair: 801-750-2975 (USU) 801-750-2992 (FAX) 801-753-3924 (home)

101. Re: INTERNET PACKET GATEWAY

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-11 00:52:12 UTC
From: chris@kd3bj.uucp
Message-ID: <CBKL31.Hr3@kd3bj.uucp>
Source record: 51838

M16616@mwvm.mitre.org writes:

>Is there an INTERNET PACKET gateway on the East Coast USA similar to N0ARY? .
>
>
My system will _soon_ be set up, but isn't quite there yet.
--
73 de KD3BJ (Chris Nadovich, chris@flam.com)

102. Re: Meteori scatter and Troposcatter

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-11 16:28:41 UTC
From: garym@alsys.com
Message-ID: <1993Aug11.162841.21840@alsys.com>
Source record: 51839
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.space,rec.radio.amateur.misc

In <246ota$971@jethro.Corp.Sun.COM> tjonz@caliban.Corp.Sun.COM (Todd Jonz) writes:
> > The "6M early morning crowd" has used troposcatter which is enhanced
> > by extra meteor activity to work up and down the west coast

>Troposcatter? Is this what happens when little bits of tropo re-enter the
>atmosphere? (:^) Seriously, this is a new term to me. Are troposcatter and
>troposheric ducting related?

I'm not sure what property of the Troposphere causes troposcatter propagation but it is a weak signal mode where you get forward scattering of your signal over the horizon, giving a range of up to about 500 miles on 6m, it is usable on VHF, UHF and SHF. Troposcatter propagation is subject to fast and slow fading.

I used to maintain a tropo link as part of a military phone system. It was a wideband (100+ Khz) FM signal on 2.3 GHz and the two sites were 98 miles apart. With the high power we used and the space and polarity diversity we were able to maintain a 60 dB S/N on our voice circuits with a 99.98% reliability. With amateur requirements (much less S/N needed and narrower bandwidth) the equipment needed should be much less that what we used.

The setup consisted of two 1 Kw transmitters, each going to it's own 2m dish. One was horizontally polarized, the other vertical, for polarity diversity, since fading is less likely to occur in both planes at the same time. On the receive side there were four receivers and a voting system. Two receivers were on the upper dish (about 110'), with one vertical and one horizontal, the other two receivers were on the lower dish (at about 40'), also with one vertical and one horizontally polarized. Giving space diversity and polarity diversity. Our receive signal at the input to the preamps was typically about -90 dBm and normally in the -80 to -100 dBm range, but with ducting it could get up to -20 dBm, or fading could drop it down to -120 dBm. Fast fading had a period of anywhere from 0.5 to 10 seconds with a 10-20 dB variation in the signal, slow fading occurred over hours or days.

--GaryM
--
Gary Morris KK6YB Internet: garym@alsys.com
San Diego, CA USA Phone: +1 619-457-2700 x128 (work)

103. ALINCO DJ160 ON PACKET ?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-11 18:26:29 UTC
From: drs@ccd.harris.com
Message-ID: <1993Aug11.182629.3207@ccd.harris.com>
Source record: 51741

I HAVE AN ALINCO DJ160 HANDI-TALKIE THAT I WOULD LIKE TO PUT ON PACKET
USING THE BAYCOM MODEM. I DON'T KNOW HOW THE MICROPHONE IS SET UP ON THAT
RADIO. DOES THE AUDIO AND PTT EXIST ON THE SAME LINE? ANYBODY KNOW HOW TO
HOOK IT UP? IT WOULDN'T BE A PROBLEM IF IT CAME WITH A SCHEMATIC!!!
DOUG, N4IJ, PALM BAY, FL

104. Internet <--> packet gateway instructions

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-11 18:27:12 UTC
From: pat@Tandem.com
Message-ID: <CBLxxE.910@tandem.com>
Source record: 51740

I have had a few email requests for instructions on how
to use my gateway, so here it is. Since I am running
N0ARY's code, there are no big differrences for those
of you who have his instructions.

There are still a few problems with the phone line, which
is why the phone number is not listed.

Enjoy.
-pat N6QMY :-)

N6QMY/BBS Internet Gateway Operating Instructions
April 11, 1993

LOCAL USERS:

Local users are those that log into the bbs via the bbs's telephone modem
port (510-xxx-xxxx) or via one of the 4 tnc ports (145.09, 145.79, 223.62,
or 441.50). Each local user has a bbs account that is used to customize
how the bbs interacts with the user.

Local users can set their account up so that all incoming mail addressed
to their call will be forwarded via a gateway to internet and on to
other networks (mcimail, compuserve, etc). All the user needs to do is
enter his email address and turn the feature on.

EMAIL bob@hal.com
EMAIL ON

When the EMAIL feature is turned on the packet message will be deleted
at the time of forwarding through the gateway. So care should be taken
that the paths are correct prior to turning the feature on, for instance
enable it, send a test message, and disable it. After a successful
transfer re-enable the feature. To disable the auto forwarding feature
simply type:

EMAIL OFF

Messages can be sent by packet users to the internet users via the gateway.
This applies to users at N6QMY as well as users at other bbs's. Begin by
sending a message to IPGATE@N6QMY with the first line of the message being
the letters "To:" followed by the internet address of the recipient.

KB6UCZ de N6QMY >
sp ipgate@n6qmy
Enter your subject:

```
Meeting?
Enter your message body:
To: bob@hal.com
Are you planning to attend the club meeting on Thursday? Give me
a call. 73, Theresa
^Z
```

NOTE: That the recipient cannot respond to the message unless they are a ham and registered with the gateway. He/she becomes registered by sending a message from his internet host to gateway-request@lbc.com.

REMOTE USERS:

Remote users are those that do not log into N6QMY directly but merely appear from the packet world to use it as home. If a packet user checks the "White Pages" for a remote user the entry comes back as @N6QMY. The packet user then address his message to YOURCALL@N6QMY and the bbs will do the translation and forwarding to internet.

It is not necessary for a person to know your actual internet address nor use the SP IPGATE method described above. From the packet network it appears that you are just another user at N6QMY.

WHITE PAGES:

The "White Pages" is a distributed database of all the bbs users. Most bbs users in the US are represented in the database as well as many from other countries. When a user chooses a home bbs, that bbs generates an update that is sent to the regional servers and then distributed to all the other bbs's. An entry consists of; call, home bbs, first name, zip, city and state. When a user wishes to send another packet user a message he/she consults the white pages (WP) for the home bbs.

REGISTERING:

Before a user, both local and remote, can send a message from internet into the bbs system he/she must register with the gateway. This is done by sending a message from the host that he/she intends to use to gateway-request@lbc.com with the following information:

CALL:
FIRST NAME:
CITY & ST:
ZIP:

HOME BBS:

When a request is received the "From" field is copied directly into a file with the requesters call. Whenever the gateway receives a message bound for packet it scans this file comparing on the "From" field. When a match is found the gateway uses the associated call from then on. If there is no match the mailer bounces the message with a one-liner indicating the the user must register.

If you currently use another bbs as home this needs to be stated
in the request. Otherwise you will be assigned N6QMY as your home.
If you choose not to use N6QMY as your home you must make sure
people know to send your message to YOURCALL@N6QMY.#NOCAL.CA.USA.NA
to pass through the gate. Your WP entry will be wrong.

EXECUTING BBS COMMANDS REMOTELY:

Many of the commands available to local users is also available to
remote users by sending a message to the bbs. Here is a subset of
the commands currently available.

LIST listing messages
LOOKUP look up calls in the on-line callbook
WHO call dump a users account information
READ read messages and files
USERS n display the last n users to connect to the bbs
INFO display manual pages of various topics
CD change directories in the file system
LS/DIR display the contents of a directory
WP call look a user up in the "White Pages"
HELP get help on how to use a command

Not all commands available to local users can be accessed via the
gate. All interactive commands are disabled as well as commands
that modify the users account.

The command parser for the bbs is very powerful and the user can
form very complex requests. For instance the following command
is valid on the bbs:

LIST LAST 20 BULLETINS FROM N6QMY
LIST ALL BULLETINS ABOUT KENWOOD

The ABOUT keyword is used to search the subjects of messages for a
given pattern, in this case KENWOOD. It can appear anywhere in the
subject line.

This is an example of how complex all the commands can become. They
can also be abbreviated down to the level understood my most other
bbs programs. Any of the following will give the same results.

L< N6ZFJ
LIST FROM N6ZFJ
LIS < N6ZFJ
L FR N6ZFJ

In most cases a minimum number of unique characters is needed to
distinguish a command.

You can get a list of commands and a translation chart from the
W0RLI BBS command set to the N0ARY BBS command set by typing
the following commands:

INFO COMMANDS
INFO W0RLI

Other commands that you may wish to execute are:

INFO MANUAL
HELP HELP
HELP LIST

Now that you know what some of the commands are this is how you go
about executing them. You send a message to cmd@bbs.lbc.com
with your commands entered one per line or separated by semicolons.
For example if you want to know if three of your buddies are in
the white pages and if the bbs has any messages about the ICOM W2A.

Send to:
cmd@bbs.lbc.com

Subject: you can put anything here
wp n0ary n6zfj n6une
list all about w2a
.

The bbs will execute the commands and respond to you via return mail.

SENDING MAIL TO PACKET:

Once registered the user is free to begin using the gateway to send
messages from his host through the gateway into the packet world.
How much you have to specify of a users address depends on how much
the bbs already knows about the user.

If the bbs knows the home bbs of the user and his home bbs is know to
the N6QMY bbs, which many of them are, you simply need to supply
the call of the user.

n6oim@bbs.lbc.com

If the N6QMY bbs doesn't know of the user but does know where his
home bbs is, then you need to supply just the home bbs call in
addition to the users.

n6oim%n6iiu@bbs.lbc.com

Notice that the call and home bbs are separated by a percent sign '%'
rather then the '@' which is used in the packet domain. This is because
the '@' has a meaning in the internet address.

If the N6QMY bbs has no knowledge of either the user or his home bbs,
then you probably have the wrong home bbs or it is a new bbs. In which
case you will have to supply the full address so the bbs will know
how to route the message.

n6oim%n6iiu.#nocal.ca.usa.na@bbs.lbc.com

This level of addressing is hardly ever needed and normally means that
the home bbs is in error.

Bulletins can be sent in a similar fashion. The address is made up
of a keyword, which can be any six character word and a distribution.
Distributions are local to an area. For instance SBAY is valid in
northern CA, it probably has no meaning at all in Topeka, KS.

Valid distributions are:
ALLUS *please avoid this one*
ALLUSW all western US
ALLCA all California, any 2 letter state should work

So if you trying to find a cw filter for a Kenwood TS440.

Send to:
want%allca@bbs.lbc.com

Subject: Kenwood TS440, CW filter
If you have one of these you are willing to part with please
give me a call or leave message, thanks.
73, KB6UCZ@N6QMY.#NOCAL.CA.USA.NA
.

Be descriptive, brief, and always include your full return address in
the message. Also please try to limit your distributions to small
regions. Using the ALLUS distribution really slows down the flow of
messages.

INFO ON THE N6QMY BBS:

The bbs came into being in April of 1993 and was the second one anywhere
to run the N0ARY BBS code (the first being N0ARY himself). The bbs has
4 rf ports, 2 phone ports, the internet port, and is working on a voice synthesizer port.
The latter would allow users to check for messages
via DTMF from their handhelds.

The bbs itself runs on a Sun workstation under Unix. The code was
written by Bob Arasmith (N0ARY) to focus on the user. Great care was
taken to make the bbs very forgiving to the novice user but very flexible
and powerful for the old-timer. The bbs can be configured to interact
with each user differently. Some examples are:

* List messages in either descending or ascending order.

* Specify a list of keywords that the user wishes not to see displayed
when a list is performed, similar to a kill file.

* .signature and .vacation files.

* Specify how many lines the users terminal is capable of displaying
before scrolling, the bbs will feed info this many lines and pause
allowing the user to catch up and continue or abort the operation.
Similar to more.

* Users can put commonly executed commands in keystroke macros that are accessible via a single keystroke.

A manual is currently available describing the commands and their permutations. This manual will be available later this year as a postscript file. Run the command INFO MANUAL to learn how to get one via the post office. It is not available in an ascii format.

If you have any questions about the internet gateway or the bbs in general please drop me a message.

73, -pat
n6qmy@n6qmy.#nocal.ca.usa.na
pat@lbc.com

105. Looking for the bug fix for the FBB BBS

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-12 04:29:15 UTC
From: madsendean@bvc.edu
Message-ID: <1993Aug11.232916.5288@bvc.edu>
Source record: 51742

Can anyone tell me where I may FTP the program to fix the bug affecting the holding of messages for F6FBB's SERV.EXE? I have checked NIC.FUNET.FI as well as UCSD.EDU.

Does anyone have an idea where this patch program may be found?

73,
Dean - KE0WO
MADSENDEAN@BVC.EDU
KE0WO @ KE0WO.#NWIA.IA.USA.NA

```
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
+ * * ****** ****** * * ***** +
+ Dean Madsen, KE0WO * * * * ** * * * * +
+ Inet: madsendean@bvc.edu * * * * * * * * * * * +
+ * * **** * * * * * * * * * +
+ Packet: * * * ** * * * * * +
+KE0WO @ KE0WO.#NWIA.IA.USA.NA* * ****** ****** * * ***** +
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
```

106. BAYPAC and standard software

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-12 05:11:47 UTC
From: lauren@vortex.com
Message-ID: <CBMrrn.317@vortex.com>
Source record: 51743

Greetings. With all the talk about the BAYPAC, a couple of questions
come to mind:

1) Since it is really only a modem, I assume 1200bps is the limit?
2) Since it depends on its own software for all packet operations,
is it possible to use "other" packages in conjunction with it?
Is there a interface for higher level applications? If so,
does anyone make use of it?

Thanks.

--Lauren--

107. New to HAM, need handi talki advice?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-12 11:52:36 UTC
From: mercer@ncs.dnd.ca
Message-ID: <1993Aug12.115236.28818@netfs.dnd.ca>
Source record: 51744
Cross-posted to:
rec.radio.amateur.equipment,rec.radio.amateur.digital.misc,rec.radio.amateur.packet,rec.ham-radio,rec.ham-radio.packet

Hi all;

Just got my basic certification yesterday and am now in the
market for a handi talki with the goal (once cash flow improves) of
getting into packet.

Shopping around Ottawa, I have narrowed my selection down
to two units:

1) ICOM IC-P2AT 2m band @ $375 canadian; and
2) ICOM IC-24AT 2m and 440 @ $460.

I am really new to all this and would like some advice on how I
should proceed. Is the addition of 440 worth 85 canadian (aprox 43
cents US ;>). Any general comments about these radios?

Please remember that the untimate goal is to set up a packet
station and also to have some fun with Satelites.

73 de VE3XMJ (Dave Mercer)

PS. If there are any packeteers out there from the Ottawa area, I would
love to hear from you.

108. PK-232MBX ... OPINIONS

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-12 22:12:01 UTC
From: ericf@kits.sfu.ca
Message-ID: <1993Aug12.221201.27795@sfu.ca>
Source record: 51747

Hi, I'm new to the world of HAM and Packet so I would like to
have a few opinions before I start spending money on things. I want
to receive telemetry from satellites (esp. that radio astronomy one)
and I want to receive images from NOAA and METEOR. Is the PK232 what
I should be looking at ? It is CDN $439 in Vancouver, Canada. I would
rather not buy a different box for each satellite I want to receive.
Is there an FAQ for this particular TNC ? or TNC's in general ?

Thanks in advance for suggestions and help.

Eric Fuller
ericf@sfu.ca

109. PK-900 and PcPackratt for Windows software

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-13 14:34:00 UTC
From: nmr1248@venus.lerc.nasa.gov
Message-ID: <13AUG199310345131@venus.lerc.nasa.gov>
Source record: 51764

Hello,

My husband and I have an AEA PK-900 TNC and are using the AEA PcPakratt for Windows software. Well, since this is a new version of the software, we have been noticing several problems and was wondering if anyone else is encountering these problems. We have been observing things like, the program locking up the computer to the point where even the clock stopped. Several times the screen would "refresh" itself, i.e. it would redraw the whole screen. Other times, our typing would get ahead of what the program would send out. For example, it would reach the point where a station would be done transmitting to us but we would have to wait for the screen to catch up before we could type back to them.

We use RTTY, AMTOR and Pactor with the PcPakratt and right now there doesn't seem to be a correlation between one mode and a particular problem. We plan to write AEA and let them know of these 'bugs' but first we wanted to know if anyone else has noticed similar problems while using the Pk-900 or another TNC and the PcPackratt for Windows. If anyone has found any solutions to these problems, we would love to hear it.

Thanks for reading this.
Nancy - kc4iyd

P.S. I have been really enjoying AMTOR, Pactor and RTTY. Are there any YL's out there who use these modes and would like to set up a schedule or just email me about your experiences. I have talked to over 40 people in these modes and only one has been a YL. Several OMs told me that I was the first YL they've talked to. :)

Nancy Rabel Hall nmr1248@venus.lerc.nasa.gov
Space Station Freedom --... ...-- -.. . KC4IYD
NASA - Lewis Research Center stamp collector, SF addict

110. Paket 5 - where?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-13 15:20:39 UTC
From: chardi@cs.man.ac.uk
Message-ID: <1993Aug13.162039@cs.man.ac.uk>
Source record: 51748

Greetings,

Where can I get hold of a copy of Paket 5? Is there a site
I can ftp it from?

Ian.

--

[Ian Chard, Systems Integration | "The universe is a spheroid region,]
[Email: chardi@cs.man.ac.uk | 705 metres in diameter."]
[NTS: G7OMZ @ GB7NWP.#16.GBR.EU |]
[AMPRnet: g7omz@g7omz.ampr.org | -- Computer, ST:TNG (Remember Me)]

111. Guide to the Personal Radio Newsgroups

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-15 11:00:24 UTC
From: pschleck@unomaha.edu
Message-ID: <radio/personal-intro-1-745412421@unomaha.edu>
Source record: 51749
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.packet,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.info,rec.answers,news.answers

```
Posted-By: auto-faq 2.4
Archive-name: radio/personal-intro
Revision: 1.4 06/30/93 12:04:14
Changes: new rec.radio.amateur.* newsgroups, cs.utexas.edu gateway

(Note: The following is reprinted with the permission of the author.
Due to the recent reorganization, it is also on a temporarily-
accelerated posting schedule as follows:

July weekly
August bi-weekly
September back to monthly)

This message describes the rec.radio.amateur.*, rec.radio.cb, rec.radio.info,
and rec.radio.swap newsgroups. It is intended to serve as a guide for the new
reader on what to find where. Questions and comments may be directed to the
author, Jay Maynard, K5ZC, by Internet electronic mail at
jmaynard@oac.hsc.uth.tmc.edu. This message was last changed on 30 June 1993 to
add the groups created during the latest reorganization vote and the
description of the cs.utexas.edu gateway.

History
=======

Way back when, before there was a Usenet, the Internet hosted a mailing list
for hams, called (appropriately enough) INFO-HAMS. Ham radio discussions
were held on the mailing list, and sent to the mailboxes of those who had
signed up for it. When the Usenet software was created, and net news as we
now know it was developed, a newsgroup was created for hams: net.ham-radio.
The mailing list and the newsgroup were gatewayed together, eventually.

As the net grew, and as packet radio came into vogue, packet discussion began
to dominate other topics in the group and on the list. This resulted in the
logical solution: a group was created to hold the packet discussion, and
another corresponding mailing list was created as well: net.ham-radio.packet
and PACKET-RADIO, respectively.

These two groups served for several years, and went through Usenet's Great
Renaming essentially unchanged, moving from net.ham-radio[.packet] to
rec.ham-radio[.packet]. Readership and volume grew with the rest of the
network.

The INFO-HAMS mailing list was originally run from a US Army computer at
White Sands Missile Range, SIMTEL20. There were few problems with this
```

arrangement, but one was that the system was not supposed to be used for commercial purposes. Since one of hams' favorite pastimes is swapping gear, it was natural for hams to post messages about equipment for sale to INFO-HAMS/rec.ham-radio. This ran afoul of SIMTEL20's no-commercial-use restriction, and after some argument, a group was created specifically for messages like that: rec.ham-radio.swap. This group wasn't gatewayed to a mailing list, thus avoiding problems.

While all this was happening, other folks wanted to discuss other aspects of the world of radio than the personal communications services. Those folks created the rec.radio.shortwave and rec.radio.noncomm newsgroups, and established the precedent of the rec.radio.* hierarchy, which in turn reflected Usenet's overall trend toward a hierarchical name structure.

The debate between proponents of a no-code ham radio license and its opponents grew fierce and voluminous in late 1989 and 1990. Eventually, both sides grew weary of the debate, and those who had not been involved even more so. A proposal for a newsgroup dedicated to licensing issues failed. A later proposal was made for a group that would cover the many recurring legal issues discussions. During discussion of the latter proposal, it became clear that it would be desirable to fit the ham radio groups under the rec.radio.* hierarchy. A full-blown reorganization was passed by Usenet voters in January 1991, leading to the overall structure we now use.

After the reorganization, more and more regular information postings began to appear, and were spread out across the various groups in rec.radio.*. Taking the successful example of the news.answers group, where informational postings from across the net are sent, the group rec.radio.info was created in December, 1992, with Mark Salyzyn, VE6MGS, initially serving as moderator.

In January, 1993, many users started complaining about the volume in rec.radio.amateur.misc. This led to a discussion about a second reorganization, which sparked the creation of a mailing list by Ian Kluft, KD6EUI. This list, which was eventually joined by many of the most prolific posters to the ham radio groups, came up with a proposal to add 11 groups to the rec.radio.amateur hierarchy in April 1993. The subsequent vote, held in May and early June, approved the creation of five groups: rec.radio.amateur.digital.misc (to replace .packet), .equipment, .homebrew, .antenna, and .space.

The Current Groups

I can hear you asking, "OK, so this is all neat history, but what does it have to do with me now?" The answer is that the history of each group has a direct bearing on what the group is used for, and what's considered appropriate where.

The easy one is rec.radio.amateur.misc. It is what rec.ham-radio was renamed to during the reorganization. Any message that's not more appropriate in one of the other groups belongs here, from contesting to DX to ragchewing on VHF to information on becoming a ham.

The group rec.radio.amateur.digital.misc is for discussions related to (surprise!) digital amateur radio. This doesn't have to be the common two-meter AX.25 variety of packet radio, either; some of the most knowledgeable folks in radio digital communications can be found here, and anything in the general area is welcome. The name was changed to emphasize this, and to encourage discussion not only of other text-based digital modes, such as AMTOR, RTTY, and Clover, but things like digital voice and video as well. The former group, rec.radio.amateur.packet, has not been removed as of this writing, but it is obsolete, and you should use .digital.misc instead. The group has the .misc as part of the name to allow further specialization if the users wish it, such as .digital.tcp-ip.

The swap group is now rec.radio.swap. This recognizes a fact that became evident shortly after the original group was formed: Hams don't just swap ham radio gear, and other folks besides hams swap ham equipment. If you have radio equipment, or test gear, or computer stuff that hams would be interested in, here's the place. Equipment wanted postings belong here too. Discussions about the equipment generally don't; if you wish to discuss a particular posting with the buyer, email is a much better way to do it, and the other groups, especially .equipment and .homebrew, are the place for public discussions. There is now a regular posting with information on how to go about buying and selling items in rec.radio.swap; please refer to it before you post there.

The first reorganization added two groups to the list, one of which is rec.radio.amateur.policy. This group was created as a place for all the discussions that seem to drag on interminably about the many rules, regulations, legalities, and policies that surround amateur radio, both existing and proposed. The neverending no-code debate goes here, as does the New Jersey scanner law, the legality of ordering a pizza on the autopatch, what a bunch of rotten no-goodniks the local frequency coordinating body is, and so on.

The other added group is rec.radio.cb. This is the place for all discussion about the Citizens' Band radio service. Such discussions have been very inflammatory in rec.ham-radio in the past; please do not cross-post to both rec.radio.cb and rec.radio.amateur.* unless the topic is genuinely of interest to both hams and CBers - and very few topics are.

The rec.radio.info group is just what its name implies: it's the place where informational messages from across rec.radio.* may be found, regardless of where else they're posted. As of this writing, information posted to the group includes Cary Oler's daily solar progagation bulletins, ARRL bulletins, the Frequently Asked Questions files for the various groups, and radio modification instructions. This group is moderated, so you cannot post to it directly; if you try, even if your message is crossposted to one of the other groups, your message will be mailed to the moderator, who is currently Mark Salyzyn, VE6MGS. The email address for submissions to the group is rec-radio-info@ve6mgs.ampr.ab.ca. Inquires and other administrivia should be directed to rec-radio-request@ve6mgs.ampr.ab.ca. For more information about rec.radio.info, consult the introduction and posting guidelines that are regularly posted to that newsgroup.

The groups rec.radio.amateur.antenna, .equipment, .homebrew, and .space are for more specialized areas of ham radio: discussions about antennas, commercially-made equipment, homebrewing, and amateur radio space operations. The .equipment group is not the place for buying or selling equipment; that's what rec.radio.swap is for. Similarly, the .space group is specifically about amateur radio in space, such as the OSCAR program and SAREX, the Shuttle Amateur Radio EXperiment; other groups cover other aspects of satellites and space. Homebrewing isn't about making your own alcoholic beverages at home (that's rec.crafts.brewing), but rather construction of radio and electronic equipment by the amateur experimenter.

The rec.radio.amateur.misc, .packet, and .policy groups, and the rec.radio.info group, are available by Internet electronic mail in digest format; send a mail message containing "help" on a line by itself to listserv@ucsd.edu for instructions on how to use the mail server. The rec.radio.swap group is not available for reading by electronic mail. At this writing, the most recently added groups are also not available for reading by electronic mail, although that may change.

All of the groups can be posted to by electronic mail, though, by using a gateway at the University of Texas at Austin. To post a message this way, change the name of the group you wish to post to by replacing all of the '.'s with '-'s - for example, rec.radio.swap becomes rec-radio-swap - and send to that name@cs.utexas.edu (rec-radio-swap@cs.utexas.edu, for example). You may crosspost by including multiple addresses as Cc: entries (but see below). This gateway's continued availability is at the pleasure of the admins at UT-Austin, and is subject to going away at any time - and especially if forgeries and other net.abuses become a problem. You have been warned.

A Few Words on Crossposting
===========================

Please do not crosspost messages to two or more groups unless there is genuine interest in both groups in the topic being discussed, and when you do, please include a header line of the form "Followup-To: group.name" in your article's headers (before the first blank line). This will cause followups to your article to go to the group listed in the Followup-To: line. If you wish to have replies to go to you by email, rather than be posted, use the word "poster" instead of the name of a group. Such a line appears in the headers of this article.

One of the few examples of productive cross-posting is with the rec.radio.info newsgroup. To provide a filtered presentation of information articles, while still maintaining visibility in their home newsgroups, the moderator strongly encourages cross-posting. All information articles should be submitted to the rec.radio.info moderator so that he may simultaneously cross-post your information to the appropriate newsgroups. Most newsreaders will only present the article once, and network bandwidth is conserved since only one article is propagated. If you make regular informational postings, and have made arrangements with the moderator to post directly to the group, please cross-post as appropriate.

--
Jay Maynard, EMT-P, K5ZC, PP-ASEL | Never ascribe to malice that which can
jmaynard@oac.hsc.uth.tmc.edu | adequately be explained by stupidity.
"If my car ran OS/2, it'd be there by now" -- bumper sticker
GCS d++ p+ c++ l+ m+/- s/++ g++ w++ t+ r

--
73, Paul W. Schleck, KD3FU

pschleck@unomaha.edu

Celebrating 60 years of the Univ. of Maryland ARA - W3EAX (1933-1993)

112. 9600 packet mods for IC-229-H

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-15 22:36:52 UTC
From: kd4cim@vulcan.com
Message-ID: <68ec9B1w165w@vulcan.com>
Source record: 51750
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment

Howdy,

I need a copy of the mods to an ICOM 229-H for 9600 baud packet operation
with a G3RUH modem.

Please e-mail (unless you think other might be interested).

Thanks,,,,,,,

Oh, if you didn't make it to Huntsville, there was a real neat packet
showcase. 56KB GRAPES modems, 9600 modems and various radios, Ethernet
connections.... Well, I came home with some 9600 modems and I need a mod
for the ICOM, I have the mods for DR-1200T and other I am interested in.

de Jerry

BHM AmprNet - kd4cim@kd4cim.ampr.org [44.100.113.19]
Packet Radio - KD4CIM @ KD4CIM.AL.USA.NA
Internet - kd4cim@vulcan.com

113. Packet under Linux

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-16 08:11:29 UTC
From: cerdini@cismhp.univ-lyon1.fr
Message-ID: <24nffh$49k@cismsun.univ-lyon1.fr>
Source record: 51751

Linux is installed on my PC computer. I'm looking for software which can
be used with Linux OS to connect myself on my BBS...

Is there somewhere C source of terminal emulator ?

73'
--
Michel CERDINI BP5574 69247 Lyon Cedex 05 | E-Mail cerdini@cism.univ-lyon1.fr
BBS/RTC Videotex ZENITH (8 acces) 24h/24 | AX25 F1ITS@FF2LY.FRHA.FRA.EU
Minitel: 7836.1996 - V32b/V42b: 7836.1001 |AmprNet F1ITS.AMPR.ORG [44.151.69.10]

114. Re: Packet under Linux

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-16 14:38:25 UTC
From: kraft@shadow
Message-ID: <24o651INN94h@news.gac.edu>
Source record: 51752

cerdini@cismhp.univ-lyon1.fr (Michel Cerdini) writes:

> Linux is installed on my PC computer. I'm looking for software which can
> be used with Linux OS to connect myself on my BBS...

> Is there somewhere C source of terminal emulator ?

I assume you mean that you have a PK232 on a serial port and you wish to
talk to it? Try kermit or pcomm or minicom or ... just look on your
favorite Linux ftp site, such as sunsite.unc.edu. If you installed SLS
you should have at least kermit and minicom.

steve

--
Steven Kraft kraft@caleb.gac.edu kraft@nic.gac.edu KE9RW
Academic Computing, Gustavus Adolphus College, St. Peter, MN

115. Re: How to set deviation

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-16 15:20:34 UTC
From: fred-mckenzie@ksc.nasa.gov
Message-ID: <fred-mckenzie-160893100551@k4dii.ksc.nasa.gov>
Source record: 51754

In article <sRoZ8B3w165w@inqmind.bison.mb.ca>, bills@inqmind.bison.mb.ca (Bill Shymanski) wrote:
>
> Anyone built the deviation meter in "73" and compared it with a
> "pro" deviation meter ? I bought the issue after seeing several
> mentions on Internet - it just looks like a peak detector. In curiosity
> I hooked up a scope to the discriminator of my TR7400 that I use for
> packet work.

Bill-

I missed the 73 article you mentioned. The only problem might be finding a way to calibrate it.

On the other hand, your scope hookup should make a fine deviation measuring system. You can calibrate it by setting up a carrier dead-center, and offsetting your receiver by plus and minus 5 KHz and 10 KHz.

I have found many veteran hams with packet signals I couldn't copy. I think it is because most of us buy a packet TNC, and just hook it up with no adjusting.

In my opinion, you should adjust the TNC deviation with the calibrate mode set to toggle between the high and low tones. Raise the level until it reaches the peak deviation limit, and back off. A packet signal set to 3.5 KHz two-tone deviation, should about right for a 5.0 KHz peak deviation system. In theory, the "square wave" approach should work, since it is an FM system. However, it doesn't seem to work as well in practice.

I should point out that there is a difference in opinion here. Some "experts" suggest a maximum of 2.0 KHz packet deviation. While this may work in most cases, I prefer the strongest non-distorted signal, for the best signal-to-noise ratio. The only justification for narrower deviation I can think of, is for satellite work, where the doppler effect would cause clipping of off-frequency signals.

73, Fred, K4DII

116. Re: Packet under Linux

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-16 15:41:00 UTC
From: arne@grenoble.hp.com
Message-ID: <24o9qc$aph@hpscit.sc.hp.com>
Source record: 51753

A port of the Packet TCP/IP suite is available at many sites, you
will want to look for WAMPES or JNOS.

Both of these provide TCP/IP, netrom and some other goodies.
You will need a TNC in Kiss mode though...

As you seem to be located in Lyon, get in contact with FC1SSE or F5PJE,
they can help you out!

Arne F/Pa0KKV

117. 9600 baud packet mods....

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-16 23:18:28 UTC
From: kd4cim@vulcan.com
Message-ID: <HTBe9B2w165w@vulcan.com>
Source record: 51755
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment

I posted a previous msg requesting 9600 baud mods for the IC-229H. So far, I haven't had a positive answer on that one. The radio doesn't belong to me, but from some some of the reponses, it appears that there is not a varactor input for the TX available in the IC-229H. Can anyone confirm or deny that.

I also had a question regarding the 9600 modification for a Kenwood TR-7400. That is also a radio with which I am not familiar. If you have a mod for the TR-7400, please forward it to me. Also, I would obviously be most interested in replies from those who have actually made said mod.

Thanks.......

de Jerry

BHM AmprNet - kd4cim@kd4cim.ampr.org [44.100.113.19]
Packet Radio - KD4CIM @ KD4CIM.AL.USA.NA
Internet - kd4cim@vulcan.com

118. Re: How to set deviation

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-17 02:34:58 UTC
From: dts@world.std.com
Message-ID: <CBvtuD.D36@world.std.com>
Source record: 51756

In article <fred-mckenzie-160893100551@k4dii.ksc.nasa.gov> fred-mckenzie@ksc.nasa.gov (Fred McKenzie) writes:
>In article <sRoZ8B3w165w@inqmind.bison.mb.ca>, bills@inqmind.bison.mb.ca >(Bill Shymanski) wrote:
>>
>> Anyone built the deviation meter in "73" and compared it with a
>> "pro" deviation meter ? I bought the issue after seeing several
>> mentions on Internet - it just looks like a peak detector. In curiosity
>> I hooked up a scope to the discriminator of my TR7400 that I use for
>> packet work.
>
>Bill-
>
>I missed the 73 article you mentioned. The only problem might be finding a
>way to calibrate it.
>
>On the other hand, your scope hookup should make a fine deviation measuring
>system. You can calibrate it by setting up a carrier dead-center, and
>offsetting your receiver by plus and minus 5 KHz and 10 KHz.
>
>I have found many veteran hams with packet signals I couldn't copy. I
>think it is because most of us buy a packet TNC, and just hook it up with
>no adjusting.
>
>In my opinion, you should adjust the TNC deviation with the calibrate mode
>set to toggle between the high and low tones. Raise the level until it
>reaches the peak deviation limit, and back off. A packet signal set to 3.5
>KHz two-tone deviation, should about right for a 5.0 KHz peak deviation
>system. In theory, the "square wave" approach should work, since it is an
>FM system. However, it doesn't seem to work as well in practice.
>
>I should point out that there is a difference in opinion here. Some
>"experts" suggest a maximum of 2.0 KHz packet deviation. While this may
>work in most cases, I prefer the strongest non-distorted signal, for the
>best signal-to-noise ratio. The only justification for narrower deviation I
>can think of, is for satellite work, where the doppler effect would cause
>clipping of off-frequency signals.

I suppose one could ask you the reverse. What is the point of driving the signal to the limit? Keeping the signals to lesser deviation levels allows for more slop, as is needed when doppler is an issue (always keep the deviation low when working MIR or the shuttle). The listening TNC needs only to be able to pick out the shifts, which can be done with less than 100% deviation audio. If you err on the low side, you will still be decoded (and will be

able to easily determine when you are too low).

TAPR has a nice kit that allows you to build a deviation meter for a reasonable price. It is a 68HC11-based board which fits into a Tandy Pro-59 scanner (was $79 on sale recently) or other similar scanner. This approach works very well. Highly recommended and you'll never have to guess again!

--

Daniel Senie Internet: dts@world.std.com
Daniel Senie Consulting n1jeb@world.std.com
508-365-5352 Compuserve: 74176,1347

119. TCP/IP and unix machines

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-17 05:33:32 UTC
From: "...green spleen..." <dobrowol@ux1.cso.uiuc.edu>
Message-ID: <24pqjc$nk3@vixen.cso.uiuc.edu>
Source record: 51757

How is TCP/IP on unix machines handled? More specifically, how would
incoming connections (logins and passwords) be handled? Would people
have access to the entire filesystem(s) or only certain areas specified
by some packet program?

--
LunarWolf KB9IQX ...somos agresivos,
spleen@uiuc.edu no violentos...

120. Re: Packet under Linux

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-17 07:44:17 UTC
From: uho@informatik.uni-kiel.de
Message-ID: <24q28hINNo92@minnie.informatik.uni-kiel.de>
Source record: 51758

In <24o9qc$aph@hpscit.sc.hp.com> arne@grenoble.hp.com () writes:

>A port of the Packet TCP/IP suite is available at many sites, you
>will want to look for WAMPES or JNOS.

We've (dg3lp, Holger Petersen and dl5lu, myself) been trying with more
and more success to run Wampes under Linux. It turns out that installation
and configuration is a little bit tricky. It currently runs fine with
a stand alone TNC in Kiss mode. One problem remains: With 1200 Bit/s modem
transfer rate, the effective is far below what is necessary for resonable
dialogs. In a direct connection this can be as low as 20 characters per
minute :-(. Are there any more parameters that need to be adjusted to
increase the effective rate? If not, is the tcpip overhead really so big?

A related question: Are there drivers to run a baycom style modem under
Linux?

Greetings,
dl5lu, Ulrich

--
Ulrich Hoffmann email: uho@informatik.uni-kiel.de
Institut fuer Informatik, Universitaet Kiel Tel: +49 431 560426
Preusserstr 1-9, D-24105 Kiel, Germany Fax: +49 431 566143

121. Re: How to set deviation

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-17 13:06:05 UTC
From: gary@ke4zv.uucp
Message-ID: <1993Aug17.130605.15774@ke4zv.uucp>
Source record: 51759

In article <CBvtuD.D36@world.std.com> dts@world.std.com (Daniel T Senie) writes:
>In article <fred-mckenzie-160893100551@k4dii.ksc.nasa.gov> fred-mckenzie@ksc.nasa.gov
(Fred McKenzie) writes:
>>
>>In my opinion, you should adjust the TNC deviation with the calibrate mode
>>set to toggle between the high and low tones. Raise the level until it
>>reaches the peak deviation limit, and back off. A packet signal set to 3.5
>>KHz two-tone deviation, should about right for a 5.0 KHz peak deviation
>>system. In theory, the "square wave" approach should work, since it is an
>>FM system. However, it doesn't seem to work as well in practice.
>>
>>I should point out that there is a difference in opinion here. Some
>>"experts" suggest a maximum of 2.0 KHz packet deviation. While this may
>>work in most cases, I prefer the strongest non-distorted signal, for the
>>best signal-to-noise ratio. The only justification for narrower deviation I
>>can think of, is for satellite work, where the doppler effect would cause
>>clipping of off-frequency signals.
>
>
>I suppose one could ask you the reverse. What is the point of driving the
>signal to the limit? Keeping the signals to lesser deviation levels allows
>for more slop, as is needed when doppler is an issue (always keep the deviation
>low when working MIR or the shuttle). The listening TNC needs only to be
>able to pick out the shifts, which can be done with less than 100% deviation
>audio. If you err on the low side, you will still be decoded (and will be
>able to easily determine when you are too low).

The reason you want to use the maximum deviation within the limits
of the receiving equipment, and the distortion limit of the transmitting
equipment, is that it enhances the FM threshold. That can give you
dramatically better BER on a marginal channel. If your signal is heard
pinning the needle on the other end, the threshold doesn't matter, but
if you're a bit white noisy, then the threshold effect can offer a
dramatic reduction in bit errors.

Gary

--
Gary Coffman KE4ZV |"If 10% is good enough | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | for Jesus, it's good | uunet!rsiatl!ke4zv!gary
534 Shannon Way | enough for Uncle Sam."| emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -Ray Stevens |

122. Deviation and frequency emphasis (was Re: How to set deviation)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-17 22:04:51 UTC
From: dana@lando.la.locus.com
Message-ID: <1993Aug17.220451.127413@locus.com>
Source record: 51761

In article <fred-mckenzie-160893100551@k4dii.ksc.nasa.gov> fred-mckenzie@ksc.nasa.gov (Fred McKenzie) writes:

>I have found many veteran hams with packet signals I couldn't copy. I
>think it is because most of us buy a packet TNC, and just hook it up with
>no adjusting.

I have this experience frequently.

>In my opinion, you should adjust the TNC deviation with the calibrate mode
>set to toggle between the high and low tones. Raise the level until it
>reaches the peak deviation limit, and back off. A packet signal set to 3.5
>KHz two-tone deviation, should about right for a 5.0 KHz peak deviation
>system. In theory, the "square wave" approach should work, since it is an
>FM system. However, it doesn't seem to work as well in practice.

Hmmm... I think I disagree with this method. Standard practice dictates that transmitted signals have a +6dB/octave frequency response. In other words, the deviation should be twice as much at 2200Hz than at 1100Hz. Of course, most receivers have de-emphasis circuits (which attempt) to restore a flat frequency response. A phase-modulated transmitted inherently experiences the pre-emphasis, but a direct-FM transmitter requires a pre-emphasis network. When measuring deviation, one must look directly at discriminator output, since the audio output of the radio will have been de-emphasized (and possibly also further filtered in the audio chain). Even when looking at the discriminator output, make sure that you can trust the output; some designs hang large capacitors across the discriminator output that must be removed to remove de-emphasis.

I personally believe the correct approach is to adjust for *no more* than 4KHz of deviation on the 2200Hz tone. The 1200 Hz should *always* be lower in deviation than the 2200Hz tone; if not, there's something wrong with your transmitter. I personally would recommend using *3KHz deviation at 2200Hz*. One of the reasons to use smaller amounts of deviation than the 4.5Khz number is simple; distortion that is not noticeable on voice may noticeably degrade packet performance. A radio with a narrow or off-center IF filter (they exist!) will distort the wider deviation signals quite a bit.

Furthermore, I've done some testing with radios in the shack. The GE MVP I use for 1200 baud packet provides a low-impedance discriminator output. I use a 12k/.01uF RC lowpass filter followed by a voltage follower to provide a de-emphasized output, thus avoiding distortion in the MVP audio stages. This is a "standard" 120uS de-emphasis. Using a service monitor, this configuration has proven to be very good. However, looking at signals on 145.01, I would say virtually everyone is far too hot, running

peak deviations in excess of 5Khz. Furthermore, virtually everyone in my area displays pretty large cases of "twist", i.e., the 1200 and 2200Hz tones are significantly different in amplitude. I would say the average twist I've seen is greater than 3dB and as much as 6dB.

I'm curious where the twist is coming from. My Motorola MCX100, a pre-emphasized direct-FM transmitter, will produce a signal with under 1dB of twist when adjusted for about 3KHz deviation on a 2200Hz tone. My MVP, a phase modulated radio, produces less than 1dB of twist. My guess is that people run too much output from the TNC into the transmitters, and the signal is clipped and arbitrarily low-pass filtered, resulting in uneven amplitudes.

It seems that the people running 5KHz+ deviation also have the worst twist.

As a little gripe, I noticed that the local, very popular, MSYS BBS port on 145.01 looked quite hot. I asked the operator what deviation he was running and he said "Huh? I've never looked".
--
* Dana H. Myers KK6JQ | Views expressed here are *
* (310) 337-5136 | mine and do not necessarily *
* dana@locus.com DoD #466 | reflect those of my employer *
* This Extra supports the abolition of the 13 and 20 WPM tests *

123. Re: TCP/IP and unix machines

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-18 00:10:19 UTC
From: trier@odin.ins.cwru.edu
Message-ID: <24rs1b$icc@usenet.INS.CWRU.Edu>
Source record: 51760

In article <24pqjc$nk3@vixen.cso.uiuc.edu>,
...green spleen... <dobrowol@ux1.cso.uiuc.edu> wrote:
>How is TCP/IP on unix machines handled? More specifically, how would
>incoming connections (logins and passwords) be handled?

It depends on what you mean and how the Unix handles TCP/IP.

The traditional approach is to have TCP/IP in the kernel. In that
case, the access granted to inbound users depends on the network
daemons you have installed.

If you use a user-space TCP/IP, like one of the ka9q ports to Unix, the
access will be determined by the user-space TCP/IP, just as with a ka9q
on any other host OS.

In the first case, kernel TCP, you will typically have FTP, ping, and
telnet services, among others. You can disable any of the services you
do not want to offer (see /etc/inetd.conf) and you can restrict the
commands telnet users can execute by setting up their accounts with
alternate shells. For example, Unix-based BBSes often operate with the
BBS program serving as a shell.

You can always restrict a program (and therefore users of that program)
to one branch of the filesystem by using chroot. Check out the man
page for chroot for more details. This might be appropriate if you
are worried about the safety of something like a Unix-port ka9q.

Stephen

--
Stephen Trier (trier@ins.cwru.edu - MIME OK)
Network Software Engineer
IRIS/INS/T
Case Western Reserve University

124. Re: TCP/IP and unix machines

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-18 03:39:41 UTC
From: "...green spleen..." <dobrowol@ux1.cso.uiuc.edu>
Message-ID: <24s89t$53v@vixen.cso.uiuc.edu>
Source record: 51762

trier@odin.ins.cwru.edu (Stephen C. Trier) writes:

>It depends on what you mean and how the Unix handles TCP/IP.

Yes, I was a bit vague in my question.

>If you use a user-space TCP/IP, like one of the ka9q ports to Unix, the
>access will be determined by the user-space TCP/IP, just as with a ka9q
>on any other host OS.

What I meant to ask was how passwords are sent over packet. Wouldn't others
be able to "see" a user's password if they were just sent over the
air 'as is'?

tom...
--
LunarWolf KB9IQX ...somos agresivos,
spleen@uiuc.edu no violentos...

125. Need advice on Multi-mode controllers

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-18 14:20:33 UTC
From: mebly@eng.umd.edu
Message-ID: <24tdrhINNatg@mojo.eng.umd.edu>
Source record: 51763

My wife is a new Tech+ and wants to get involved in VHF packet.

I've always wanted to get into HF RTTY and this looks like my big chance :-).

I'm aware of "cheap" multimode controllers from AEA (PK232), Kantronics (KAM Plus) and MFJ (??). Are any of these reasonable for HF RTTY? Or, should I go to the DSP Multimode controllers (read expensive)? Or, finally, should I get a cheap TNC for packet and something else for HF RTTY?

Please respond via e-mail. I'll provide a summary if there are enough responses.

Thanks and 73.

--
Mark Bailey KD4D Motto: Life's too short to drink cheap beer.
mebly@eng.umd.edu Disclaimer: I didn't really say this.

126. Re: TCP/IP and unix machines

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-18 15:18:33 UTC
From: trier@odin.ins.cwru.edu
Message-ID: <24th89$9e0@usenet.INS.CWRU.Edu>
Source record: 51765

In article <24s89t$53v@vixen.cso.uiuc.edu>,
...green spleen... <dobrowol@ux1.cso.uiuc.edu> wrote:
>What I meant to ask was how passwords are sent over packet. Wouldn't others
>be able to "see" a user's password if they were just sent over the
>air 'as is'?

Absolutely.

I suppose one could get fancy and use Kerberos. Would that violate the
Part 97 ban on encrypted traffic?

Stephen

--
Stephen Trier (trier@ins.cwru.edu - MIME OK)
Network Software Engineer
IRIS/INS/T
Case Western Reserve University

127. Re: TCP/IP and unix machines

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-18 16:44:33 UTC
From: willmore@iastate.edu
Message-ID: <willmore.745692273@metropolis.gis.iastate.edu>
Source record: 51766

trier@odin.ins.cwru.edu (Stephen C. Trier) writes:

>In article <24s89t$53v@vixen.cso.uiuc.edu>,
>...green spleen... <dobrowol@ux1.cso.uiuc.edu> wrote:
>>What I meant to ask was how passwords are sent over packet. Wouldn't others
>>be able to "see" a user's password if they were just sent over the
>>air 'as is'?

>Absolutely.

>I suppose one could get fancy and use Kerberos. Would that violate the
>Part 97 ban on encrypted traffic?

From my reading I would say that encryption is not allowed, but crypto used
for authentication is ok. As long as you're only proving who you are and not
telling anyone anything (sending a message) I don't think that there would
be any conflict. Think about access to a autopatch. You have to have a code
to access it, what's the difference?

Cheers,
David
--
----
willmore@iastate.edu | "Death before dishonor" | "Better dead than greek" |
David Willmore | "Ever noticed how much they look like orchids? Lovely!" |
----

128. Visual basic and radio..

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-18 20:05:43 UTC
From: dihi@bsdihi.atr.bso.nl
Message-ID: <745704343snx@bsdihi.atr.bso.nl>
Source record: 51768

Up till now I didn't succeed in finding a nice computer program
under windows to control my ts450sat tx/rx.
So the idea was born to write something in visual basic. I am not a
programmer at all...

In visual basic it is very easy to create a nice user interface. No prob.
I know the format of the data coming from and going to the transceiver.

Problem: i have to write some coding behind the defined user interface.
So, i looked in the help file to find a command to read and/or write
data in a specific format to the com1 port of my pc. Also a statement
to configure the comport in the right speed/bitsetting.

HELP programmers/hams of this world. Couldnt find it in the helpfile of
Visual Basic. Who helps me a little further with my 'experiment' to
build my own GUI??

73's

Dick Hissink PA3DSP
Email:dihi@bsdihi.atr.bso.nl

129. Re: Need advice on Multi-mode controllers

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-18 21:21:33 UTC
From: dts@world.std.com
Message-ID: <CBz4ny.6ow@world.std.com>
Source record: 51767

I use the KAM Plus and the PK232 for VHF packet and for HF RTTY. I would recommend the KAM Plus at this point as a better value, since it allows VHF packet and HF activity at the same time. Match with this KaGold and you'll have a nice setup.

The MFJ unit seems to be the most problematic. Many people I have worked on HF RTTY who have them are on their 3rd or 4th unit.

Good luck and we'll see you on the RTTY subbands (and perhaps get a few contest points!).

73,

Dan N1JEB

--

Daniel Senie Internet: dts@world.std.com
Daniel Senie Consulting n1jeb@world.std.com
508-365-5352 Compuserve: 74176,1347

130. Re: TCP/IP and unix machines

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-18 23:31:35 UTC
From: brian@nothing.ucsd.edu
Message-ID: <24ue4nINNkoc@network.ucsd.edu>
Source record: 51769

trier@odin.ins.cwru.edu (Stephen C. Trier) writes:
>I suppose one could get fancy and use Kerberos. Would that violate the
>Part 97 ban on encrypted traffic?

Informed (?) comment on this seems of the opinion that using Kerberos
solely for authentication would NOT violate the encryption-to-obscure-meaning
section of the USA FCC rules, as long as that was the extent of its use.

That means, of course, that you couldn't use the Kerberos encrypted
telnet or rlogin programs which in the mode where they also use an
encrypted session stream.

There's a lot of overhead involved in establishing Kerberos authentication
for remote login, but it DOES solve the problem of initially logging in
to an internet host, in that the initial login would not require a
password. The resulting session would be in the clear, however, so you
couldn't do any further logins without either chaining authentication
or finding some other way (challenge-and-response) to avoid sending
those further passwords in the clear.
- Brian

131. Re: Digital Hierarchy

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-19 06:42:03 UTC
From: ikluft@uts.amdahl.com
Message-ID: <d8lz03TAd81900@amdahl.uts.amdahl.com>
Source record: 51774
Cross-posted to: rec.radio.amateur.packet,rec.radio.amateur.digital.misc

[Followups to rec.radio.amateur.digital.misc]

ben@nj8j.atl.ga.us (Ben Coleman) writes:
>Of course, the question will be(consider this a preview of what the
>discussion will look like in news.groups when this RFD gets cranking in a
>few months): is there sufficient traffic to justify the new groups?

Yeah, agreed. When you propose a new newsgroup, you need to *know* that you're putting your proposal out to some very skeptical masses that could, and probably will, tear it apart. Of course, I'm not saying that's bad - the net would be a big mess (well, bigger mess than it is :-) if it wasn't difficult to make a new newsgroup.

>Obviously, there will be another try at creation of rrad.tcpip. Based
>on what I've seen recently, rrad.packet will probably be in the running
>also. But is there really enough RTTY, AMTOR, or PACTOR traffic on here to
>justify a separate newsgroup for them? In the end, I think they will be
>left to rrad.misc until enough long-term traffic shows up to justify
>creating separate groups.

I also would not be surprised if another try is made at r.r.a.d.tcpip. But there was already quite a bit of resistance at moving the r.r.a.packet to r.r.a.d.misc. I'll go with the flow on a r.r.a.d.packet but I would not look forward to the mess that will cause with the mail lists again.

Anyway, it's still a long way off. Ben mentioned this but I'll expand on it. r.r.a.d.tcpip failed the last vote so it has to wait 6 months before anyone can try again. That will be January 1, 1994 for the earliest possible posting of a Request for Discussion (RFD). Assuming that goes well, it will be 21-30 days before voting can begin, which would also be 21-30 days. So, no matter how enthusiastic anyone is for it, it can't happen before February or March of next year. So be patient... let's properly settle into the new groups we just got before jumping to make more.

If anyone's interested, I'd expect that the initial discussion for an RFD will happen on the "rec.radio.amateur working group" mail list - a collection of the volunteers who post periodic informational articles & FAQs, the moderator of rec.radio.info, some ARRL staff, and other regular participants in the rec.radio.amateur newsgroups. If you think you'd like to be a part of it or just watch, it's always open for you to join. Just send a message to rra-wg-request@amdahl.com and ask to join the list. Don't forget to include your callsign so you can be properly introduced to the group.
--
Ian Kluft KD6EUI PP-ASEL Amdahl Corporation, Open Systems Development
ikluft@uts.amdahl.com Santa Clara, CA

[disclaimer: any opinions expressed are mine only... not those of my employer]

132. Re: Packet under Linux

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-19 08:06:33 UTC
From: rich@mulvey.com
Message-ID: <930819.040633.2Z1.rusnews.w165w@mulvey.com>
Source record: 51771

cerdini@cismhp.univ-lyon1.fr (Michel Cerdini) writes:

> Linux is installed on my PC computer. I'm looking for software which can
> be used with Linux OS to connect myself on my BBS...
>
> Is there somewhere C source of terminal emulator ?
>
> 73'
> --
> Michel CERDINI BP5574 69247 Lyon Cedex 05 | E-Mail cerdini@cism.univ-lyon1.f
> r
> BBS/RTC Videotex ZENITH (8 acces) 24h/24 | AX25 F1ITS@FF2LY.FRHA.FRA.EU
> Minitel: 7836.1996 - V32b/V42b: 7836.1001 |AmprNet F1ITS.AMPR.ORG [44.151.69.
> 10]
--
There are two general-purpose telecomm programs that I know of that will
compile directly under Linux: Minicom and Pcomm. They both emulate
the commercial program Procomm. If you get the Slackware release of
linux, Minicom will be included in the distribution disks.

- Rich

--
Rich Mulvey Amateur Radio: N2VDS 787 Elmwood Terrace
rich@mulvey.com Rochester, NY 14620

133. Re: TCP/IP and unix machines

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-19 08:39:00 UTC
From: abottone@minerva1.bull.it
Message-ID: <CC0011.rD@minerva1.bull.it>
Source record: 51772

...green spleen... <dobrowol@ux1.cso.uiuc.edu> writes:

>How is TCP/IP on unix machines handled? More specifically, how would
>incoming connections (logins and passwords) be handled? Would people
>have access to the entire filesystem(s) or only certain areas specified
>by some packet program?

TCP/IP is at the lower level. At an upper level you find the login
programs that validate a user (normally with a password). These login
programs are responsible for executing the user shell if and when
the user is validated. The Unix System Administrator can then set up
an environment that is specific to a user or a set of users, but that's
far beyond TCP/IP per se. This is Unix Administration and that does not
care how the user logs into the system (TCP/IP, serial terminal, X.25 TPAD,
or whatever).

--

* Alessandro Bottonelli | IS/Net Security Officer - Bull Italia *
* E-Mail: A.Bottonelli@it12.bull.it | Phone: +39-(0)2-6779-8424 Bullcom=260 *
* Bulltx: /BULLX/IT12X/BOTTONELLI A. | Fax: +39-(0)2-6779-8463 *

134. Which multimode TNC MFJ 1278 or KAM Plus

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-19 09:44:29 UTC
From: pierce@asd1.jsc.nasa.gov
Message-ID: <1993Aug19.145433.3367@aio.jsc.nasa.gov>
Source record: 51773

I am looking to purchase a multimode TNC, I think I want either a MFJ 1278B or a KAM Plus. If you own or have used one of these let me know your opinion on the TNC, the manual and the software. Also let me know if anyone uses these on a macintosh. Does anyone perfer another multimode in the same price range($300)?

Thank you for any help.

Terry Pierce

135. Report on the ATS-606

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-19 15:15:42 UTC
From: 8919157y@levels.unisa.edu.au
Message-ID: <1993Aug19.091542.20882@levels.unisa.edu.au>
Source record: 51770

Hello from down under,

I am posting for a friend of mine (Peter) who's a radio buff here in Australia.

He has a report on the ATS-808 which is a portable 45 memory shortwave receiver produced by SANGEAN. It is my understanding that this is considered a top of the range product in the shortwave community. His request is for a comparison of the ATS-808 with the new product (1993) from SANGEON the ATS-606; also a report on what ever you might know about the ATS-606. The ATS-606 is a physically smaller (ie. compact) receiver which retails for less than the ATS-808 in Australia. Why? Is this the same case where you are? The ATS-606 is also sold by Siemens as the RK-659, if that helps.

Also would anybody know the price of the ATS-606 unit in Singapore? Or maybe the price of the unit from your local retailer? Your assistance would be of great value to Peter. Below I have included the features for the ATS-606 found in our local 1993 Dick Smith catalogue.

The ATS-606 Features: ATS-606 Frequency Ranges:
1). Automatic tuning system 1). FM 87.50 - 108 MHz
2). 45 station memories 2). LW 153 - 513 kHz
3). Comprehensive LCD screen 3). MW 522 - 1710 kHz
4). Scan tuning & direct keypad tuning 4). SW 1.715 - 29.995 MHz
5). Dual alarm clocks
6). Dual time setting
7). Adjustable sleep timer
8). Soft carry case

Thanx
Mark
(19th August 1993)

+--==--+
|>>>>> Mark Dankiw :: [IN%"8919157y@lv.levels.unisa.edu.au"] :: VAX <<<<<|
|>>>>>> :: [8919157y@lux.levels.unisa.edu.au] :: UNIX <<<<<<|
|>>>>>>>>>> Electronics School ::: University of South Australia <<<<<<<<<<|
|>>>>>>>> :: My opinions are my own and not of this University! :: <<<<<<<<|
+--==--+

136. Re: TCP/IP and unix machines

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-19 17:51:47 UTC
From: lanzo@tekelec.com
Message-ID: <1993Aug19.175147.13848@gecko.uucp>
Source record: 51778

In a prior article ...green spleen... <dobrowol@ux1.cso.uiuc.edu> wrote:

[prior discussion omitted ...]

> What I meant to ask was how passwords are sent over packet.
> Wouldn't others
> be able to "see" a user's password if they were just sent over the
> air 'as is'?

Absolutely. If you are concerned about privacy, then amateur
packet radio is the wrong place for you. All of the data
sent between stations is "in the clear", so you certainly
wouldn't want to use it as the medium for transferring any
"delicate" information.

There's not much we can do about this either under present
regulations, since using codes / cyphers or other things
whose purpose is to "obscure meaning" is forbidden.

Locally, most of our TCP/IP packet stations just use
callsigns as the "login" id's, and the person's first
name as the "password" (or don't have one at all).
In fact, most of the stations here will accept any
callsign for the login-id -- the default is to let an
unrecognized user on without even bothering with a
password.

Note though that this doesn't necessarily apply to whatever
Unix SW you are using. The packet stations around here
which run TCP/IP usually are on Amigas or IBM-PCs running OS/2 --
and any notion of "user accounts" or "login ids" is something
maintained by the packet software, not the underlying OS.

I don't know about any Unix packet radio SW per se, but it
may well be the same -- that the packet radio "accounts"
exist purely within the packet radio SW (running under one
real Unix login probably) and aren't otherwise related
to Unix accounts. On the other hand ....

Anyone wanna provide a synopsis of packet radio software
available for Unix systems and how it works?

+---+------- /// -----+
| Mark Lanzo KD4QLZ lanzo@tekelec.com 919-460-5576 | \\\/// |
+---+---- \XX/ -------+

137. Re: TCP/IP and unix machines

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-19 17:59:14 UTC
From: lawrence@combdyn.com
Message-ID: <1993Aug19.175914.23031@combdyn.com>
Source record: 51777

In article <willmore.745692273@metropolis.gis.iastate.edu> willmore@iastate.edu (David Willmore) writes:
>From my reading I would say that encryption is not allowed, but crypto used
>for authentication is ok. As long as you're only proving who you are and not
>telling anyone anything (sending a message) I don't think that there would
>be any conflict. Think about access to a autopatch. You have to have a code
>to access it, what's the difference?
>
Yeah, but the code can't stay a secret to access the autopatch....anybody with a DTMF decoder can figure out what the autopatch (or linking) codes are. They can also figure out what number you are dialing.

--
--EMAIL----------------------------PHONE-----------FAX------------
| WORK: lawrence@combdyn.com | (403)529-2162 | (403)529-2516 | CallSign
| HOME: dreamer@lhaven.uumh.ab.ca | (403)526-6019 | (403)529-5102 | VE6LKC
----
disclamer = (working_for && !representing) + (Combustion Dynamics Ltd.);

138. Re: Visual basic and radio..

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-20 07:37:47 UTC
From: da884@cleveland.Freenet.Edu
Message-ID: <251v0b$b9v@usenet.INS.CWRU.Edu>
Source record: 51775

```
DI> Up till now I didn't succeed in finding a nice computer
DI> program under windows to control my ts450sat tx/rx.
DI> So the idea was born to write something in visual basic. I
DI> am not a programmer at all...
DI>
DI> In visual basic it is very easy to create a nice user
DI> interface. No prob. I know the format of the data coming
DI> from and going to the transceiver.
DI>
DI> Problem: i have to write some coding behind the defined user
DI> interface. So, i looked in the help file to find a command
DI> to read and/or write data in a specific format to the com1
DI> port of my pc. Also a statement to configure the comport in
DI> the right speed/bitsetting.
DI>
DI> HELP programmers/hams of this world. Couldnt find it in the
DI> helpfile of Visual Basic. Who helps me a little further with
DI> my 'experiment' to build my own GUI??
DI>
```

```
Ok two things, first. You want to look into the news group called
ALT.LANG.BASIC, second I'm not sure on the whole complete format of
it but it sort of goes like this, to open the comport you would
do OPEN "COMx,1200,?????? not sure of the rest, they may give you a direction
to look at, sorry i con't give you more since I'm at work
and have no reference books here for basic.. There is Source code out
there for the Drake R8, in Visual Basic, which may help ya.
```

139. Re: Visual basic and radio..

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-20 07:38:31 UTC
From: da884@cleveland.Freenet.Edu
Message-ID: <251v1n$bc2@usenet.INS.CWRU.Edu>
Source record: 51776

For got to add this at the end

David Toste.
VE3TOS.

Toronto, Ontairo.

140. Autopatch (phone patch)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-20 17:59:15 UTC
From: taalebi@gel.ulaval.CA
Message-ID: <9308201759.AA14207@stlaurent.gel.ulaval.ca>
Source record: 51779

I would like to buy an autopatch (phone patch) in order to set up
a mobile phone using two handhelds (Icom 24AT).

Conveying your recommendations and sharing your experience in this
regard will be very much appreciated.

Does anyone know of the regulations for using autopatch?

Many thanks in advance

Regards,
Ali Taalebi
taalebi@ai.mit.edu

141. Small TNC

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-20 18:01:30 UTC
From: taalebi@gel.ulaval.CA
Message-ID: <9308201801.AA14223@stlaurent.gel.ulaval.ca>
Source record: 51780

Trond (trond@phys.ucalgary.ca) writes:

>I would like to go portable on packet and now I wonder what is the
>(physically)
>smallest TNC available? I will only need to be active on vhf/uhf.
>Power consumption is also an important factor.
>It seems to me that a tnc could be made extremely small...

>I have not been looking in mags/brochures for years,
>so I have lost touch with
>what the state of the art is. :-)

>73
>Trond

You probably have heard about the software based TNC's such as BayPac and
"Poor Man's Modem".

Besides those, there is a small self-contained TNC called AR210
(export version of the TNC-210 made by Tasco, Japan).

It it the improved version of the TNC-u II or
HK21 (which used to be sold in the US by Heath Kit).

Some specs are:

- ac/dc plug on the back (10-13 V, 100 mA),
- can run on a rechargeable battery ($20 extra!)
- supports the KISS mode,
- 1200 baud,
- cabel ready for Handhelds,
- 60mm(W) x 100mm(L) x 20mm(H),
- 9 pin serial port on the back (HK21 was 25 pin!),
- front panel accomodates the power switch, LED's and R/T plugs.

Note: As opposed to the HK21, there is no removeable chips inside.
The new surface-mount technology is used!

Henry Radio in California (800-877-7979) sells it for
$180 (rechargeable battery and adaptor not included).
It seems expensive to me, however I like its compactness and neat packaging.

If you decide to buy one, make sure to ask them to include the manual.
They forgot to send me the manual.

--73's de N1HPP
==========
__ _ M. Ali Taalebinezhaad,

/) // The Canadian Institute
/- -/ // o for Robotics and Intelligent Systems
/ /_</_<_ Phone: (418) 656-2131 (Ext. 8026)
Fax: (418) 656-3594
Email: taalebi@gel.ulaval.ca
Addr.: Robotics & Vision Laboratory
Pouliot Bld., Room 00114
Elec. Eng. Dept., Laval Un.
Quebec, PQ, G1K-7P4, Canada
==========

142. Re: Visual basic and radio..

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-20 23:51:07 UTC
From: david@djwhome.demon.co.uk
Message-ID: <745915867snx@djwhome.demon.co.uk>
Source record: 51640

In article <745704343snx@bsdihi.atr.bso.nl> dihi@bsdihi.atr.bso.nl (Dick Hissink) writes:

>So, i looked in the help file to find a command to read and/or write
>data in a specific format to the com1 port of my pc. Also a statement
>to configure the comport in the right speed/bitsetting.

There is a VBX for accessing serial ports in VB 2 +. Unfortunately it is
only supplied in the professional edition.

Have you looked into calling the comms device driver DLL; I don't know if
there are any problem parameter types.

--
David Woolley

143. Re: TCP/IP and unix machines

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-21 02:38:32 UTC
From: znha@ve3ppe.isis.org
Message-ID: <CC38o8.9C0@ve3ppe.isis.org>
Source record: 51648

LunarWolf KB9IQX <dobrowol@ux1.cso.uiuc.edu> wrote:
>How is TCP/IP on unix machines handled? More specifically, how would
>incoming connections (logins ...

Generally (SunOS perspective) the telnet daemon (telnetd) blocks waiting on a well known socket, and when it goes away, inetd goes and forks another. Telnetd forks a login process, with it's input/output connected to the now open socket. Login's i/o now appears on your end of the socket.

> ... and passwords) be handled? ...

Standard login program. Probably the same program used by getty.

> ... Would people
>have access to the entire filesystem(s) or only certain areas specified
>by some packet program?

Whatever login forks, they run. If you chroot() and then fork a shell, they run that shell. If you fork say, a bbs program, they run that. If you fork /bin/false, they run that too--albeit, it'll exit quickly... :-)

73, Gord.
znha@ve3ppe.isis.org (internet) ve3ppe@ve3osq.#eon.ca.na (packet)

144. assistance: modem <-> x-mitter/receiver link

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-21 03:58:05 UTC
From: sengle@blkbox.COM
Message-ID: <CC3CCu.2I6@NeoSoft.com>
Source record: 51781
Cross-posted to: comp.dcom.modems,comp.robotics,rec.radio.amateur.digital.misc

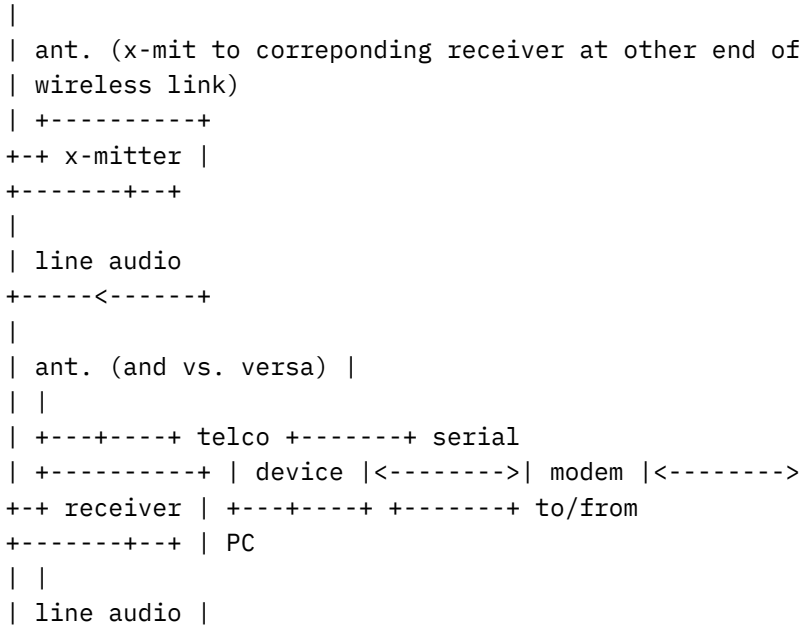
I need to link two computers together via a wireless link.
After giving it some thought, I came up with a scheme using
modems (I already have) and line level (as in home stereo)
audio receiver / transmitter pairs (available at Walmart).
See ASCII chart below for a rough layout. The only thing
I'm not sure about is the box labeled "device". I guess that
the "device" would have to provide the standard telco tip/ring
electrical interface to the modem, as well as the circuitry to
convert the telco signal to individual send/receive line level
signals. With two of these set-ups connected via the radio
link, the modems would be connected back-to-back, thus
linking the PCs together.

And now the $64K question - does anyone know how to build the
"device"? Or where to buy one (preassembled or kit)? Or is
there a better way of doing this? Cheap RF modems?

FYI: One PC is my Mac, the other is (well, will be) the 6.270
robotic board set from MIT. A physically small/low-powered
"device" is highly desired.

I'm cross-posting to comp.dcom.modems, comp.robotics, and
rec.radio.amateur.digital.misc. Please e-mail or post -
If I get a lot of e-mail, I will summarize to the net.

Thanx!



```
+----->------+
```

Steve Engle
sengle@blkbox.com

145. Re: assistance: modem <-> x-mitter/receiver link

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-21 08:17:04 UTC
From: patrick@nic.cerf.net
Message-ID: <254lm0$nbp@news.cerf.net>
Source record: 51782
Cross-posted to: comp.dcom.modems,comp.robotics,rec.radio.amateur.digital.misc

In article <CC3CCu.2I6@NeoSoft.com> sengle@blkbox.COM (Steven W. Engle) writes:
>I need to link two computers together via a wireless link.
>... (all sorts of stuff omitted) ...
>Steve Engle
>sengle@blkbox.com
>

It might be worth rethinking your design. A frequently used technique
for close wireless communciation is via infra-red transmitters and receivers;
exactly the way your remote control talks to your VCR. A simple circuit
including a UART for parallel to serial conversion and an IR transmitter/
receiver for the wireless link can provide an easy to program two
way link which works as long as the IR beam reaches both stations.
It would also seem feasable to use a standard RS-232 port for the
serial communication by simply adapting an IR link between the two
computers' ports. I recommend consulting historic Radio and Electronics
magazines for more specific part number and circuit information.

Hope this helps!

-patrick@cerf.net

146. Re: assistance: modem <-> x-mitter/receiver link

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-21 14:16:34 UTC
From: gary@ke4zv.uucp
Message-ID: <1993Aug21.141634.5272@ke4zv.uucp>
Source record: 51784
Cross-posted to: comp.dcom.modems,comp.robotics,rec.radio.amateur.digital.misc

In article <CC3CCu.2I6@NeoSoft.com> sengle@blkbox.COM (Steven W. Engle) writes:
>I need to link two computers together via a wireless link.
>After giving it some thought, I came up with a scheme using
>modems (I already have) and line level (as in home stereo)
>audio receiver / transmitter pairs (available at Walmart).
>See ASCII chart below for a rough layout. The only thing
>I'm not sure about is the box labeled "device". I guess that
>the "device" would have to provide the standard telco tip/ring
>electrical interface to the modem, as well as the circuitry to
>convert the telco signal to individual send/receive line level
>signals. With two of these set-ups connected via the radio
>link, the modems would be connected back-to-back, thus
>linking the PCs together.
>
>And now the $64K question - does anyone know how to build the
>"device"? Or where to buy one (preassembled or kit)? Or is
>there a better way of doing this? Cheap RF modems?
>
>FYI: One PC is my Mac, the other is (well, will be) the 6.270
>robotic board set from MIT. A physically small/low-powered
>"device" is highly desired.

```
>|
>| ant. (x-mit to correponding receiver at other end of
>| wireless link)
>| +----------+
>+-+ x-mitter |
> +-------+--+
> |
> | line audio
> +-----<------+
> |
>| ant. (and vs. versa) |
>| |
>| +---+----+ telco +-------+ serial
>| +----------+ | device |<-------->| modem |<-------->
>+-+ receiver | +---+----+ +-------+ to/from
> +-------+--+ | PC
> | |
> | line audio |
> +-----><------+
```

The "device" you want is called a 2 line to 4 line converter and
is a standard telco item available from places like Immac, Black

Box, etc. Or you can cannibalize a real phone. It's the hybrid that takes the two wire feed and splits it to the microphone and earpiece.

Since this is a "nailed up" connection, you can forget telco tip and ring voltages and ring generators. Just force the modems on line by giving one the ATA command, and the other the ATO command. Voltage on the line isn't used by the modems, unless they're oddball line powered units, and you can manually get around ringing voltage with the forced commands.

Gary
--
Gary Coffman KE4ZV |"If 10% is good enough | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | for Jesus, it's good | uunet!rsiatl!ke4zv!gary
534 Shannon Way | enough for Uncle Sam."| emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -Ray Stevens |

147. Re: assistance: modem <-> x-mitter/receiver link

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-21 14:31:09 UTC
From: gary@vulcan.com
Message-ID: <mqwm9B1w165w@vulcan.com>
Source record: 51785
Cross-posted to: comp.dcom.modems,comp.robotics,rec.radio.amateur.digital.misc

sengle@blkbox.COM (Steven W. Engle) writes:

> I need to link two computers together via a wireless link.
> After giving it some thought, I came up with a scheme using
> | ant. (x-mit to correponding receiver at other end of
> | wireless link)
> | +----------+
> +-+ x-mitter |
> +-------+--+
> |
> | line audio
> +-----<------+
> |
> | ant. (and vs. versa) |
> | |
> | +---+----+ telco +-------+ serial
> | +----------+ | device |<-------->| modem |<-------->
> +-+ receiver | +---+----+ +-------+ to/from
> +-------+--+ | PC
> | |
> | line audio |
> +-----><------+
>
> Steve Engle
> sengle@blkbox.com
>

unless you have 4-wire modems (often used on leased line circuits)
the device will have to perform a hybrid function. that is, it will
need to combine the output of the rf receiver with the input to the
rf transmitter, without returning a significant amount of energy froe the
receiver back into the transmitter. This can be done, in a couple of
different ways, but it involves either a couple of transformers and an
impedance matching circuit, or active echo cancelling (sp ?).

Anyway, if you have 2-wire modems, they may also require a little loop
current. some modems that normally require loop current can be optioned
to operate 'dry', i.e., no loop current. If you need loop current, try
at least 20 mA of VERY WELL FILTERED dc.

Good luck

Gary Tennyson
gary@vulcan.com

148. Re: assistance: modem <-> x-mitter/receiver link

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-21 15:28:01 UTC
From: sengle@blkbox.COM
Message-ID: <CC48Aq.AIK@NeoSoft.com>
Source record: 51786
Cross-posted to: comp.dcom.modems,comp.robotics,rec.radio.amateur.digital.misc

patrick@nic.cerf.net (Patrick O'Grady) writes:

>In article <CC3CCu.2I6@NeoSoft.com> sengle@blkbox.COM (Steven W. Engle) writes:
>>I need to link two computers together via a wireless link.
>>... (all sorts of stuff omitted) ...
>>
>It might be worth rethinking your design. A frequently used technique
>for close wireless communciation is via infra-red transmitters and receivers;
>exactly the way your remote control talks to your VCR. A simple circuit
> (bunch of stuff deleted)...

>-patrick@cerf.net

I built an IR link (almost exactly as you described) for anther project
last year. IR won't work here though as the link need to work through
walls, around corners, etc.. One of the computers (the 6.270) is on
(will be on) a mobile robotic platform wandering around the house...

Thanx!

Steve Engle
sengle@blkbox.com

149. radio modems for internet access

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-21 15:35:22 UTC
From: sjg@phlim.ph.kcl.ac.uk
Message-ID: <255fbq$764@sol.ctr.columbia.edu>
Source record: 51783

--

Hi there,

I posted messages along these lines to uk.radio.amateur, then I found out about this group :-)

I've been told it's possible to do this (below) - so I thought I'd ask experts on it. I'm not yet a radio amateur, but I'm planning on getting a class B license later this year (December). I've also been offered a job in April, when I finish my PhD, so I thought I'd treat myself (:-) to haveing internet access at home.

What I want to know is, is it possible to have the setup below:

```
+--------+ +--------+ +--------+ +--------+
| unix | <----> | modem | <====> | modem | <----> | atari |
+--------+ +--------+ +--------+ +--------+
```

The unix<->modem interface oughtn't be a problem. Neither should the ST<->modem interface (I'll use Ka9q). For all practical purposes it will be the same as having a PC on the end running Linux. (My STe runs the multi-user variety of system software). What's bothering me is the modem<=>modem link.

I'm hoping to use the Heatherington 56Kbaud RF modem on the 1296MHz or 430MHz frequencies. The output of the modem is a 29MHz at 1mW. How easy is it to get a 'transverter' (?) to boost the frequency to my desired one ?

Assuming that is easy enough, what distances can I expect from the modems under realistic circumstances - I live just inside London, about 8 miles from college, where the unix end modem would be. The UK regulations stipulate a maximum power level of 26dBW for 1029MHz and 16dBW for 430MHz (both relative to 1W). I can probably arrange for the unix end to be on the highest portion of the building that has ethernet (7th storey), which might help somewhat.

All I want this for is for me at home to contact 'me' (my machine) in college. I'm not setting up a gateway or anything like that. I don't expect to send porn down the line, or obscene language etc.

What may be a problem is the password for getting into the college system. I could always dial up by BT modem though, then rsh back home. That at least would stop me from sending passwords over the air (because I've been told you can't encrypt things). There may be better options - if so I'm open to suggestions...

Another possible problem is that of friends in the same house. We have a small network (2 linux PC's running X, and my STe) in our house, which would then have a connection to the internet via my STe - would it be possible for them to get mail and serve programs as well as me ?

I suppose this isn't a unique thing - if anyone else has done this and come across pitfalls that I ought to know about - I'd be very pleased to hear from you. Likewise, if it's all plain sailing, then I'd like to hear that too :-)) Very much so in fact :-) Especially if you're using the same modem/software etc.

Basically, I'm asking all this, because I don't want to spend about 350 pounds ($550 or so) on kit that won't be any use to me.

All the best,
Simon

150. Re: 99p12-SLIP <-> DOS ka9q?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-21 16:09:49 UTC
From: hedrick@geneva.rutgers.edu
Message-ID: <Aug.21.12.09.48.1993.2612@geneva.rutgers.edu>
Source record: 51659
Cross-posted to: comp.os.linux.help,comp.os.linux.admin,rec.radio.amateur.digital.misc

michaelw@desaster.hanse.de (Michael Will) writes:

>I could not do a "route add default 192.0.2.44"

The Linux route command has a non-standard syntax. You want

route add default gw 192.0.2.44

151. Re: Autopatch (phone patch)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-22 06:10:17 UTC
From: gary@ke4zv.uucp
Message-ID: <1993Aug22.061017.8793@ke4zv.uucp>
Source record: 51787

Note: I've directed followups to rec.radio.amateur.misc.

In article <9308201759.AA14207@stlaurent.gel.ulaval.ca> taalebi@gel.ulaval.CA (Ali Taalebi) writes:
>
>I would like to buy an autopatch (phone patch) in order to set up
>a mobile phone using two handhelds (Icom 24AT).
>
>Conveying your recommendations and sharing your experience in this
>regard will be very much appreciated.
>
>Does anyone know of the regulations for using autopatch?

There are basically 3 types of "autopatch" in amateur use.
The first kind, and the one that immediately comes to mind,
is the repeater autopatch. This is where a phone line is
interfaced to a normal amateur repeater through it's
normal repeater controller. In operation it is activated
by touchtone commands and operates in half duplex. IE only
one party can talk at a time with the control station being
the call originator. Thanks to the generally good coverage
of repeaters, handheld operators can generally expect ranges
of up to 60 miles. This is normally a shared resource available
to any amateur who may use the repeater. The phone patch
capability is an ancillary function of the normal repeater
controller. Many repeater controllers are suitable. One
such is the S-Com 7k at about $300. Of course you also
need the repeater, usually about $1200-3500 depending
on it's configuration.

The second kind, called the simpatch, uses two ordinary
simplex radios and a special sampling controller. When
the radio attached to the phone is activated by commands
from the other radio, it dials the phone and transmits
the phone audio nearly continously. It listens for a
short period once per second. If it hears a carrier
from the other station during this sampling interval,
it turns the circuit around and goes into receive mode,
listening to the other station's audio and transfering
it to the phone line. When the controlling station's
carrier drops, it reverses again and goes back to
transmitting the phone audio. There are a couple
of simpatch controllers on the market. They cost
around $500. And of course you need a radio with
a fast TR turnaround for the sampling. This is

classed as auxillary operation and must not be
done on 2 meters.

The third type is called a crossband patch. In this
case, two dual band radios are used to establish
a duplex telephone interconnect. Both radios transmit
and receive at the same time in a manner similar to
that of ordinary cordless telephones. A simple patch
controller can allow one station to initiate operation
with a TT command. This requires radios capable of
simultaneous dual band operation. I don't know of any
commercially available controllers specifically designed
for this service, but an ordinary repeater controller,
such as the S-Com 7k, can be pressed into this use.
Note this is auxillary operation again and both bands
in use must be above 2 meters.

This latter sounds like what you're trying to do.
As to legal questions, there are several sections
of Part 97 that can apply. Of course you need a
Technician Class license, or higher, in order to
establish such systems. You must have a positive
control system. The controlled system must ID
following the ID rules. There must be a safety
timeout timer. And the patch must conform to
normal telephone interconnect rules. The S-Com
controller can meet all these requirements, except
the license bit, you have to do that.

Secondarily, there are content restrictions in the use
of the patch. These will be loosened somewhat on Sept 12
when new rules go into effect, but in general you
can't transmit obscenity, routine business, or
the like types of conversations.

With the crossband patch and simpatch there is a further
restriction. Since you are in auxillary operation, the stations
must not transmit on 2 meters where auxillary operations
are not permitted. In the case of crossband, this leaves
out your IC24s. You need radios that operate on two bands
above 2 meters. You can use the Icoms with the simpatch, but
must do so only on 440 MHz. If you were using a repeater,
2 meter operation would be permitted since the patch is
only an ancillary function of the repeater operating under
automatic control, and repeaters are legal on 2 meters.

There is a final legal area that must be considered. That's
the case of the so called "reverse" autopatch. That's the
case where the ringing phone commands a radio into transmission.
That in effect is a third, possibly unlicensed, party initiating
transmission. That's a grey area. In the case of a repeater
autopatch, it can be argued that this is a telemetry function

and thus legal as an ancillary function of the repeater operating
under automatic control. But with the simpatch and crossband patch,
that's not as clear since only repeaters are authorized to operate
under automatic control.

In general, unless you are just wishing to experiment, I think
you'll be better served by buying a cellular telephone. They
free you of all the amateur restrictions and generally have
much better coverage.

Gary
--
Gary Coffman KE4ZV |"If 10% is good enough | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | for Jesus, it's good | uunet!rsiatl!ke4zv!gary
534 Shannon Way | enough for Uncle Sam."| emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -Ray Stevens |

152. Packet Graphics File Formats

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-22 11:48:49 UTC
From: kkrallis@leon.nrcps.ARiadne-t.GR
Message-ID: <9308221148.AA02488@leon.nrcps.ariadne-t.gr>
Source record: 51788

I have seen now and then various people posting
programs for image transmission over packet radio (PACGRAPH.C,
IMGPACK.BAS etc). I would like to check these programs and
file formats and, possibly, write a F.A.Q. I understand that
there is no central archive holding such programs, but some
hams should have copies of them. Could you please pass me
any information you have?

73 Costas

--
K.Krallis SV1XV
Athens, Greece.

E-Mail: kkrallis@leon.nrcps.ariadne-t.gr
Packet: SV1XV @ SV1UY.ATH.GRC.EU

153. rec.radio.amateur.digital.misc Frequently Asked Questions

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-22 21:09:12 UTC
From: steve@wattres.SJ.CA.US
Message-ID: <radio/digital-faq-1-746017927@wattres.SJ.CA.US>
Source record: 51789
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.packet,rec.radio.info,rec.answers,news.answers

```
Posted-By: auto-faq 2.4
Archive-name: radio/digital-faq

Frequently Asked Questions for Digital Amateur Radio
(Well, it's still mostly just packet...)

Version 1.17 - Last modified 8/22/93

This document is for unlimited distribution.

Please send corrections and additions to:
digital-faq@wattres.sj.ca.us
Which will expand to a list of people who are familiar with most digital
issues. I hope. ;-)

**********************************************************
**********************************************************
Warning!
rec.radio.amateur.packet WILL BE DELETED on 21 September, 1993. PLEASE
make sure that you are sending your traffic to rec.radio.amateur.digital.misc
by that date! Thanks!
**********************************************************
**********************************************************

The Digital Radio FAQ list will be posted on a monthly basis to
rec.radio.amateur.digital.misc, rec.radio.info, rec.answers, and news.answers.
The current version of this document is available via anonymous FTP at
ftp.cs.buffalo.edu.

Many FAQ's, including this one, are available on the archive site
rtfm.mit.edu in the directory pub/usenet/news.answers. The name under
which a FAQ is archived appears in the Archive-Name: line at the top
of the article. This FAQ is archived as radio/digital-faq.

There is also a mail server on rtfm.mit.edu, which can be addressed as
mail-server@rtfm.mit.edu. For details on how to operate this server,
send a message to that address with the word "help" in the BODY of the
message.

Table of contents:

1 Basic Packet Radio Information
1.1 What is packet radio?
1.2 What is amateur radio?
1.3 What can I do on packet radio?
1.4 Why packet over other digital modes?
```

1.5 What elements make up a packet station?
TNC (Terminal Node Controller)
Computer or Terminal
A radio
1.6 What do you mean we can all use the same channel?
1.7 What is AX.25 ?
1.8 Definitions: Commonly used terms in Amateur Packet Radio
1.9 Do's and Don'ts : Rules and Regulations

2 Computing Network Resources for Amateur Packet radio
2.1 What Newsgroups/mailing lists are available?
2.2 What anonymous FTP sites and mail servers are available?
2.3 How do I contact the ARRL through email?
2.4 Are there any gateways for mail or news
2.4.1 The W2XO Internet mail <-> packet mail gateway
2.4.2 The N0ARY Internet mail <-> full packet BBS gateway
2.4.3 LAN Gateways (Packet wormholes via Internet)

3 Networking and special packet protocols
3.1 Are there any other protocols in use other than AX.25?
3.2 What is TCP/IP?
3.3 Networking Schemes
What are some of those other networking schemes?
Digipeaters
KA-Nodes
NET/ROM
ROSE
3.4 BBS message transfer

1 Basic Packet Radio Information

1.1 What is packet radio?

Packet radio is digital communications via amateur radio. Packet radio takes any digital data stream and sends that via radio to another amateur radio station. Packet radio is so named because it sends the data in small bursts, or packets.

1.2 What is amateur radio?

Amateur Radio (sometimes called Ham Radio) is individuals using specified radio frequencies for personal enjoyment, experimentation, and the continuation of the radio art. Amateur radio operators must be licensed by their government. In the United States, the Federal Communications Commission issues amateur radio licenses. Normally, a test on operating practices, radio theory, and in some cases morse code proficiency test is administered. Amateur radio is not to be used for commercial purposes. Also, amateur radio operators are restricted from using profanity and using amateur radio for illegal purposes.

For more information on Amateur Radio in general, see the monthly frequently asked questions posting in rec.radio.amateur.misc. A copy of that FAQ is also available for FTP from ftp.cs.buffalo.edu and

by mail from rtfm.mit.edu.

1.3 What can I do on packet radio?

Keyboard-to-Keyboard contacts:

Like other digital communications modes, packet radio can be used to talk to other amateurs. For those who cannot use HF frequencies, two amateurs can talk to each other from long distances using the packet radio network.

Packet BBS operations:

Many cities have one or more packet Bulletin Board System (BBS) available on the local packet network. Amateurs can check into the BBSes and read messages from other packet users on almost any topic. BBSes are networked together over the packet network to allow messages to reach a broader audience than just your local BBS users. Private messages may also be sent to other packet operators, either locally or who use other BBSes. BBSes have the latest ARRL, AMSAT, and propagation bulletins. Many BBSes have a file section containing various text files full of information on amateur radio in general.

DX Packet Cluster:

A recent development is use of packet radio for DX spotting. HF operators connect to the local DX Packet Cluster for the latest reports on DX. Often a user will 'spot' some hot DX and distribute the DX report real time.

File Transfer:

With special software, amateurs can pass any binary files to other amateurs. Currently, this is done with TCP/IP communications, YAPP, and other specialized protocols.

Satellite Communications:

Many of the amateur radio satellites contain microcomputer systems that can provide special information to amateurs. Some satellites contain CCD cameras on board and you can download images of the earth and the stars. Others provide store and forward packet mailboxes to allow rapid message transfers over long distances. Some satellites use AX.25, some use special packet protocols developed for satellite communications. A few transmit AX.25 packets over FM transmitters, but most use SSB transmissions.

1.4 Why packet over other digital modes?

Packet has three great advantages over most of the other digital modes: transparency, error correction, and automatic control.

The operation of a packet station is transparent to the end user; connect to the other station, type in your message, and it is sent automatically. The Terminal Node Controller (TNC) automatically

divides the message into packets, keys the transmitter and sends the packets. While receiving packets, the TNC automatically decodes, checks for errors, and displays the received messages. In addition, any packet TNC can be used as a packet relay station, sometimes called a digipeater. This allows for greater range by stringing several packet stations together.

Packet radio provides error free communications because of built in error detection schemes. If a packet is received, it is checked for errors and will be displayed only if it is correct.

With VHF/UHF packet, many countries allow packet operators to operate in automatic control mode. This means that you can leave your packet station on constantly. Other users can connect to you at any time they wish to see if you are home. Some TNC's even have Personal BBSes (sometimes called mailboxes) so other amateurs can leave you messages if you are not at home.

Another advantage of packet over other modes is the ability for many users to be able to use the same frequency channel simultaneously. No other digital mode gives this ability.

1.5 What elements make up a packet station?

TNC (Terminal Node Controller): A TNC contains a modem, a CPU, and the associated circuitry required to convert between RS-232 and the packet radio protocol in use. It assembles a packet from some of the data on the serial line, computing an error check (CRC) for the packet, modulates it into audio frequencies, and puts out appropriate signals to transmit that packet over the connected radio. It also reverses the process, translating the audio that the connected radio receives into a byte stream on the RS-232 port.

Most TNC's currently use 1200 BPS (bits per second) for local VHF and UHF packet, and 300 BPS for longer distance, lower bandwidth HF communication. Higher speeds are available for use in the VHF, UHF, and especially microwave region, but they often require unusual hardware and drivers.

Computer or Terminal: This is the user interface. A computer running a terminal emulator program, a packet-specific program, or just a dumb terminal can be used. For computers, almost any phone modem communications program can be adapted for packet use, but there are also customized packet radio programs available.

A radio: For 1200 BPS UHF/VHF packet, commonly available narrow band FM voice radios are used. For HF packet, 300 BPS data is used over single side band modulation. For high speed packet (anything greater than 1200 BPS), special radios or modified FM radios must be used.

1.6 What do you mean we can all use the same channel?

Packet radio uses a protocol called AX.25. AX.25 specifies channel access (ability to transmit on the channel) to be handled by CSMA (Carrier Sense Multiple Access). If you need to transmit, your TNC monitors the channel to see if someone else is transmitting. If no one else is transmitting, then the TNC keys up the radio, and sends its packet. All the other stations hear the packet and do not transmit until you are done. Unfortunately, 2 stations could accidentally transmit at the same time. This is called a collision. If a collision occurs, neither TNC will receive a reply back from the last packet it sent. Each TNC will wait a random amount of time and then retransmit the packet.

In actuality, a more complex scheme is used to determine when the TNC transmits. See the "AX.25 Protocol Specification" for more information.

1.7 What is AX.25?

AX.25 (Amateur X.25) is the communications protocol used for packet radio. A protocol is a standard for how two computer systems are to communicate with each other, somewhat analogous to using business format when writing a business letter. AX.25 was developed in the 1970's and based of the wired network protocol X.25. Because of the difference in the transport medium (radios vs wires) and because of different addressing schemes, X.25 was modified to suit amateur radio's needs. AX.25 includes a digipeater field to allow other stations to automatically repeat packets to extend the range of transmitters. One advantage of AX.25 is that every packet sent contains the sender's and recipient's amateur radio callsign, thus providing station identification with every transmission.

1.8 Definitions: Commonly used terms in Amateur Packet Radio

44 net - The class A network designator for TCP/IP amateur packet radio. All numerical TCP/IP addresses are in the format 44.xxx.xxx.xxx.

AFSK - Audio Frequency Shift Keying. A method of representing digital information by using different audio frequencies modulated on a carrier.

AMPR - Amateur Packet Radio.

ampr.org - The high level domain recognized on Internet for amateur packet radio TCP/IP.

AMTOR - AMateur Teleprinting Over Radio. This protocol allows error-free point-to-point or multicast, single user per channel communications. Usually used on HF, but not VHF or above.

ARQ - Automatic Resend reQuest. This is the point-to-point error correcting mode for AMTOR. It works by sending bursts of 3 characters, and then the other station sends an OK/NotOK code for those 3 characters.

AX.25 - Amateur X.25 protocol. The basis of most packet systems. See section 1.7 for more information.

CRC - Cyclic Redundancy Check. The error detection scheme included in each packet. Verify that the packet was received error free.

CSMA - Carrier Sense Multiple Access. A system allowing many stations to use the same radio frequency simultaneously for packet communications.

digi - Short name for a digipeater

digipeater - A packet radio station used for repeating packets. See section 3.3.1 for more information.

FCC - Federal Communications Commission. Regulates and issues licenses for amateur radio in the United States.

FEC - Forward Error Correction. This is the multicast method of (almost) error-corrected communications on AMTOR. It works by sending each character twice.

FM - Frequency Modulation. The radio modulation scheme used for VHF and UHF packet communications.

FSK - Frequency Shift Keying. A method of representing digital information by shifting the radio carrier frequency different amounts to represent ones and zeros.

HDLC - (High-Level Data Link Control Procedures) A standard for high level link control. (ISO 3309)

KA9Q NOS - (KA9Q Network Operating System) A TCP/IP program originally developed by Phil Karn, KA9Q. Currently there are many different versions available. See section 3.2 for more information.

KA-Node - A simple networking scheme developed by TNC maker Kantronics. See section 3.3.2 for more info.

KISS - Keep It Simple Stupid. A simple interface developed for communications between TNCs and computers. This allows for most of the packet processing to be handled by the computer. Commonly used with packet TCP/IP software.

LAN - Local Area Network. A packet network developed for communications throughout a city or region. Often, the LAN uses separate frequencies from inter-city packet links.

modem - MODulator/DEModulator. Converts the analog signals into a binary data stream (a series of ones and zeros) for the TNC or a micro-computer. First step in decoding packets. It also converts binary data to analog, which is the last step in encoding packets.

NET/ROM - A scheme for packet radio networking. See section 3.3 for more information.

NODE - A network node. Often a network node running NET/ROM.

PPP - Point to Point Protocol. PPP is another protocol used for moving IP frames over a serial line. It supports host authentication, and non-transparent serial lines. It also has a standard way of negotiating header (and potentially data) compression over the line. See also SLIP.

protocol - A standard used for intercommunications between different computer systems.

RS-232 (RS-323C) - A (more or less) standard for interconnection of serial peripherals to small computer systems. In packet radio, RS-232 is the most common interface between TNC's and the Computer/Terminal.

RTTY - Radio TeleTYpe. This protocol allows point-to-point or multicast, single user per channel communications, without error correction.

SLIP - Serial Line Internet Protocol. A trivial protocol for putting IP frames over a serial line to do (potentially) cheap TCP/IP networking. Approximately the same as KISS, except over wireline networks. See also PPP.

SSB - Single Side Band. The radio modulation scheme used for HF packet and satellite packet communications.

TAPR - Tucson Amateur Packet Radio. Was the first group to create a packet radio TNC using AX.25. Soon a TAPR TNC became cloned by many others. TAPR continues development of packet radio equipment.

TCP/IP - Transmission Control Protocol/Internet Protocol. A set of utility programs used over AX.25. See sections 3.2 for more information.

TNC - Terminal Node Controller. See section 1.5 for more information.

1.9 Do's and Don'ts : Rules and Regulations

NOTE: These regulations apply only to amateurs regulated by the FCC (United States), but often are similar to regulations in other countries.

[Since I have no experience with amateur radio in other countries, I cannot make any comments. Please bring any notable exceptions to my attention. -ed]

Although there are no specific rules that apply to amateur packet radio, the general amateur radio rules force some restrictions on packet usage.

Can I set up a TNC at home and one at work so I can check my Electronic mail via packet?

This cannot be done without special restrictions. Amateur radio rules prohibit any business. Since you could have mail from your

boss (or maybe even someone selling you something over Internet), that would constitute business activity and is specifically prohibited.

Profanity can also be a complication. Since you have no control over the language used in E-mail, proper filtering is required. Since no filter scheme can catch every offense, it is best to say every message must be hand filtered.

I would like to set up a packet radio gateway between a land line computer network and the packet network. Is this possible?

Yes, and there are several such gateways in use, but they must be managed with caution. Electronic mail may be passed FROM the packet network INTO the land line network without intervention. However, mail passed TO packet radio is considered third party traffic (the sender is not an amateur) and these messages must be hand filtered to ensure that rules of message content are followed.

It's my license if I use packet radio illegally anyway, so what does anyone else care!?

Packet radio is one of the few NETWORKED systems in amateur radio. Many people have helped develop the network and there are many amateurs who own parts of the packet radio network. Sending packet BBS mail, digipeating, and sharing the channel involves the licenses of MANY people. Because of FCC rules stating that anything to come out of a transmitter (either in automatic mode or via your direct control) is the licensee's responsibility, one illegal message sent over the packet radio network could literally jeopardize the licenses of thousands of other amateurs. When in doubt, it is best to check with other amateurs about sending the message before it is sent.

I have some ideas on how to use packet radio in a new way, but I don't know if it is legal. Who could tell me if I can do it legally?

The worst thing you can do is talk to the FCC about such an issue. The FCC rules are written to be general enough to encompass but not restrict new radio activities. In the past, any non-thought-out requests sent to the FCC have meant a reduction of privilege for all amateur radio operators.

The best source for legal assistance is your national amateur radio association. In the United States, that is the American Radio Relay League (ARRL). Another good place for such conversations is over Usenet/packet mailing lists, or the amateur radio BBS network.

2 Computing Network Resources for Amateur Packet radio

This section summarizes the resources available on Internet for amateur packet radio operators.

2.1 What Newsgroups/mailing lists are available?

This is a list of all groups that regularly discuss amateur packet radio. For newsgroups, join the group through use of your news reader. For mailing lists, add a '-request' to the end of the list name to request subscriptions. For listserv groups, send mail to 'listserv' at the node which contains the list. The first line of the mail should be 'SUBSCRIBE groupname yourname'. Send the command 'help' for more information.

rec.radio.amateur.packet (Newsgroup): General discussions involving Packet Radio. This group will be deleted on 21 September!

rec.radio.amateur.digital.misc (Newsgroup): General discussions about all aspects of digital transmissions over Amateur Radio. This group is a replacement for rec.radio.amateur.packet.

rec.radio.amateur.misc (Newsgroup): General amateur radio discussion. Usually does not contain any particular information about Digital Amateur Radio.

rec.radio.amateur.policy (Newsgroup): Discussion of regulation policies regarding every aspect of amateur radio. Occasionally deals with policies of packet coordination and legal issues of packet radio.

rec.radio.swap (Newsgroup): General For-Sale for any radio equipment. Occasionally will have packet equipment for sale. Recommended location for any amateur packet radio for-sale items.

info-hams@ucsd.edu (Listserv group): A digest redistribution of the rec.radio.amateur.misc Usenet discussion.

packet-radio@ucsd.edu (Listserv group): A digest redistribution of the rec.radio.amateur.packet Usenet discussion.

ham-policy@ucsd.edu (Listserv group): A digest redistribution of the rec.radio.amateur.policy Usenet discussion

hs-modem@wb3ffv.ampr.org (Mailing list): Discussion of high speed modems and radios available and future plans. Also includes discussion of networking using high speed modems.

tcp-group@ucsd.edu (Mailing list): Group discussion of technical developments of TCP/IP over packet radio and use of the NOS TCP/IP programs.

gateways@uhm.ampr.org (Mailing list): Discussion of current gateways and future plans for gateways. May deal with sensitive internetworking issues.

listserv@knuth.mtsu.edu has several interesting mailing lists available:

GRAPES-L Discussions with GRAPES (Georgia Radio Amateur
Packet Enthusiasts Society) on 56kb WAN's and
the WA4DSY 56kb RF modem that they distribute.

TENNET-L Tennessee's efforts at a coordinated high-speed
RF packet network

GRACILIS-L Discussions on Gracilis tcp/ip packet equipment.
Includes some of the people from Gracilis.

KA9Q-UNIX Discussions on porting and using various versions
of KA9Q Unix/Xenix NET/NOS under any of a variety
of Unix/Xenix variants.

TNV-HAMS General discussions amoung email connected
amateur radio operators in and surrounding
Tennessee

Send a message with a body of "HELP" to get help from the list server. Also,
Internet users may now INTERACTIVELY work with the ListServ there by:

telnet knuth.mtsu.edu 372

or

telnet 161.45.1.1 372

For all lists at ucsd.edu, archives may be found via anonymous FTP at
ucsd.edu. Some listserv groups also have archives. Send the command
'help' to the group's listserv for more information. Digest mailings
for the ucsd.edu discussions are also available. Send mail to
listserv@ucsd.edu with the first line being 'longindex' for more
information.

Terry Stader (KA8SCP) <tstader@aol.com> maintains a list of Mac
packet-related software, and posts it periodically (somewhat less often
than monthly) to rec.radio.amateur.packet.

There appears to be a mailing list about NOS on hydra.carleton.ca, but
I don't have much more detail. Send a message to
nos-bbs-request@hydra.carleton.ca. The list name is nos-bbs@hydra.carelton.ca.

2.2 What anonymous FTP sites and electronic mail servers are available
for getting packet radio information and programs?

This is a sampling of FTP sites that carry amateur packet radio related
files. Consult the Archie archive server for info on locating
particular files. For more information on using archie, send mail to
archie@cs.mcgill.edu with the line 'help'.

ucsd.edu

Primary distribution site of KA9Q's derived TCP/IP packages. Also,
general packet radio information in the /hamradio/packet subdirectory.

wsmr-simtel20.army.mil

Very large collection of amateur radio software.

wuarchive.wustl.edu

Mirror site of Simtel20 archives. Unix directory structure, which is
easier to use then the simtel20 archive.

ftp.cs.buffalo.edu

Supplimental archive site for amateur radio information. Contains
current copies of all rec.radio.amatuer.* FAQ's.

tomcat.gsfc.nasa.gov

Packet software including Baycomm, ROSE, G8BPQ, NOS, etc.
(I have one report (from George Hitz, W1DA) that this FTP site will be
down until the end of this summer, 1993. Reportedly the site admin is
going to be in Sweden.)

akutaktak.andrew.cmu.edu

SoftKiss for the Mac, in /aw0g. Requires NET/Mac.
SoftKiss is an init/cdev/driver that allows a MAC to do packet using
a Poor Man's Packet modem.

sumex-aim.stanford.edu

NET/Mac is the port of KA9Q's NET program. It doesn't have nifty features
like scrolling or saving the windows, but the individual sessions can be
recorded into a file.

As for mail servers, there is only one that I know of at the moment:

Ham-Server@GRAFex.Cupertino.CA.US

This mail server, which is run by Steve Harding (KA6ETB), has a wide
variety of information on most aspects of amateur radio, not just digital
modes. Send a message with the body HELP to get a fairly useful listing.
Also note that Steve posts the index from the server approximately weekly
to rec.radio.amateur.misc, rec.radio.amateur.packet, and sbay.hams.

2.3 How do I contact the ARRL via electronic mail?

There are various addresses at ARRL HQ, but the most important one is
probably info@arrl.org. That is where general information about the
ARRL can be acquired. This address reaches a person, so you'll have
to specify what/who you're looking for.

2.4 Are there any gateways for mail or news between Internet and
Amateur Packet radio?

Internet / Packet Radio BBS Gateways

There are currently two comprehensive gateways between the Internet and
the packet radio BBS system. One is run by Jim Durham, W2XO, in Pennysylvania
and the other, which allows access to PBBS bulletins, as well as mail,
is run by Bob Arasmith, N0ARY, in California.

2.4.1 The W2XO Gateway

To mail from Internet to Packet:

1. Mail to: "bbs@w2xo.pgh.pa.us"

2. Make the first line of the text a Packet BBS "send" command, ie:
SP TOCALL @ BBSCALL.ROUTING-HINTS < FROMCALL

3. The "subject" line of the Internet mail becomes the "title" line
of the Packet BBS mail.

NOTE: Because of FCC regulations, Jim must hand filter each message
sent FROM Internet TO the Amateur Packet Radio BBS system. Messages
should be of minimal length and appropriate content. Read Section 1.9
(Do's and Don'ts: Rules and Regulations) regarding appropriate usage of
packet radio for more information. Always include the routing hints
with the BBS callsign.

To mail from Packet to Internet:

1. The amateur radio operator must have his callsign registered in
the gateway alias list. If you want to mail from packet to a specific
amateur on Internet, send mail to 'durham@w2xo.pgh.pa.us' (Internet) or
'W2XO @ W2XO.#WPA.PA.USA.NOAM' (Packet BBS mail) with his/her amateur
callsign and their Internet address.

2. Once the above is accomplished, packet BBS mail should be sent to
'CALL @ W2XO.#WPA.PA.USA.NOAM'. The mail will automatically be
forwarded to the Internet address of the amateur with the 'CALL'
callsign.

Jim Durham's Internet address is 'durham@w2xo.pgh.pa.us'.

2.4.2 The N0ARY Internet mail <-> full packet BBS gateway

Bob Arasmith, N0ARY, runs a gateway between the Internet mail system and
PBBS system. His gateway allows you to read, post, and respond to other
postings on the PBBS system via email. For more information, send mail
to gateway_info@arasmith.com.

2.4.3 LAN Gateways (Packet wormholes via Internet)

Currently a group of amateurs are experimenting with connecting packet
LANs together via Internet IP inside IP Encapsulation. Some of the
gateways only accept TCP/IP packets, others AX.25 packets. These
gateways uses the Internet as a transport medium, thus it is impossible
to access the packet radio network from Internet. For more
information, join the Gateways mailing list by sending mail to
"gateways-request@uhm.ampr.org".

3 Networking and special packet protocols

This is a sample of some of the more popular networking schemes
available today. By far, there are more customized networking schemes
used than listed. Consult your local packet network guru for specific
network information.

3.1 Are there any other protocols in use other than AX.25?

AX.25 is considered the defacto standard protocol for amateur radio use
and is even recognized by many countries as a legal operation mode.

However, there are other standards. TCP/IP is used in some areas for amateur radio. Also, some networking protocols use other packet formats than AX.25.

Often, special packet radio protocols are encapsulated within AX.25 packet frames. This is done to insure compliance with regulations requiring packet radio transmissions to be in the form of AX.25. However, details of AX.25 encapsulation rules vary from country to country.

3.2 What is TCP/IP?

TCP/IP stands for Transmission Control Protocol/Internet Protocol. This is commonly used over the Internet wired computer network. The TCP/IP suite contains different transmission facilities such as FTP (File Transfer Protocol), SMTP (Simple Mail Transport Protocol), Telnet (Remote terminal protocol), and NNTP (Net News Transfer Protocol)

TCP/IP doesn't use all of the AX.25 protocol. Instead, it uses special AX.25 packets called Unnumbered Information (UI) packets and then puts its own special protocol (called IP) on top of AX.25. This is used to increase efficiency of its transmissions, since IP does not require packets to be "reliable", that is to say, guaranteed delivered error-free. TCP handles the retransmission of lost and garbled packets in its own way, at a higher level. Therefore the extra information in an AX.25 "VC" (virtual circuit) frame is not useful, and thus consuming needed bandwidth.

The KA9Q NOS program (also called NET) is the most commonly used version of TCP/IP in packet radio. NOS originally was written for the PC compatible. However, NOS has been ported to many different computers such as the Amiga, Macintosh, Unix, and others. Smaller computers like the Commodore 64 and the Timex-Sinclar do not currently have version of NOS available.

3.3 Networking Schemes

What are some of those other networking schemes?

During the early days of amateur packet radio, it became apparent that a packet network was needed. To this end, the following packet network schemes where created.

Digipeaters

The first networking scheme with packet radio was Digipeaters. Digipeaters would simply look at a packet, and if its call was in the digipeater field, would resend the packet. Digipeaters allow the extension of range of a transmitter by retransmitting any packets addressed to the digipeater.

This scheme worked well with only a few people on the radio channel. However, as packet became more popular, digipeaters soon were clogging up the airwaves with traffic being repeated over long distances. Also,

if a packet got lost by one of the digipeaters, the originator station would have to retransmit the packet again, forcing every digipeater to transmit again and causing more congestion.

KA-Nodes

Kantronics improved on the digipeater slightly and created KA-Nodes. As with digipeaters, KA-Nodes simply repeat AX.25 frames. However, a KA-Node acknowledges every transmission each link instead of over the entire route. Therefore, instead of an end-to-end acknowledgement, KA-Nodes allow for more reliable connections with fewer timeouts, because acknowledgments are only carried on one link. KA-Nodes therefore are more reliable than digipeaters, but are not a true network. It is similar like having to wire your own telephone network to make a phone call.

NET/ROM

NET/ROM was one of the first networking schemes to try to address the problems with digipeaters. A user connects to a NET/ROM station as if connecting to any other packet station. From there, he can issue commands to instruct the station to connect to another user locally or connect to another NET/ROM station. This connect, then connect again, means that to a user's TNC, you are connected to a local station only and its transmissions do not have to be digipeated over the entire network and risk loosing packets. This local connection proved to be more reliable.

NET/ROM is a commercial firmware (software put on a chip) program that is used as a replacement ROM in TAPR type TNC's. Other programs are available to emulate NET/ROM. Among them are TheNet, G8BPQ node switch, MSYS, and some versions of NET.

NET/ROM nodes, at regular intervals, transmit to other nodes their current list of known nodes. This is good because as new nodes come on-line, they are automatically integrated in the network. However, if band conditions such as ducting occur, ordinarily unreachable nodes can be entered into node lists. This causes the NET/ROM routing software to choose routes to distant nodes that are impossible. This problem requires users to develop a route to a distant node manually defining each hop instead of using the automatic routing feature.

ROSE

ROSE is another networking protocol derived from X.25. Each ROSE node has a static list of the nodes it can reach. For a user to use a ROSE switch, he issues a connect with the destination station and in the digipeater field places the call of the local rose switch and the distant rose switch the destination station can hear. Other then that, the network is completely transparent to the user.

ROSE's use of static routing tables ensures that ROSE nodes don't attempt to route packets through links that aren't reliably reachable, as NET/ROM

nodes often do. However, ROSE suffers from the inability to automatically update its routing tables as new nodes come online. The operators must manually update the routing tables, which is why ROSE networks require more maintainance.

3.4 BBS message transfer

Many of the BBS programs used in packet radio allow for mail and bulletins to be transferred over the packet radio network. The BBSes use a special forwarding protocol developed originally by Hank Oredsen, W0RLI.

Besides full service BBSes, many TNC makers have developed Personal BBS software to allow full service BBSes to forward mail directly to the amateur's TNC. This allows operators to receive packet mail at night and avoid tying up the network during busy hours.

--
Steve Watt KD6GGD Packet: KD6GGD @ N0ARY.#NOCAL.CA.USA.NA
ICBM: 121W 56' 53.1" / 37N 20' 16.7" Internet: steve@wattres.SJ.CA.US
Never trust a computer bigger than you can lift. also news,root,sys,uucp,...

154. Dumb Terminal hates RF

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-23 12:19:34 UTC
From: hcheyney@magnus.acs.ohio-state.EDU
Message-ID: <CMM.0.90.4.746108313.hcheyney@magnus.acs.ohio-state.edu>
Source record: 51641
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.packet

RF from my HF rig at some frequencies, 20m in particular causes my dumb terminal to lock up. I have to turn it off and back on to get it working again. This makes HF digital operation impossible on those bands. Ohter bands are ok. Disconnecting the keyboard and I/O cables doesn't prevent it but moving the terminal several feet away does cure it. There may be a little radiation from the ladder line feed line on the rig. I need to use this type feedline since I am using an "all band dipole" feed with a transmatch.

Any ideas?

Harold, N8OCM

Internet: Cheyney.1@osu.edu

155. Digital radio - monitor needed for MS victim

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-23 16:16:11 UTC
From: Dave_Hood.MENLOPARK2@unix_link.raynet.com
Message-ID: <9308251553.AA18990@raynet.com>
Source record: 51654
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.swap

When I was back visiting family and friends in western Nebraska earlier this summer, I talked with an old friend (Jim McCafferty) who asked if I could help find a donated monitor for an MS victim (Mike). Mike was extremely depressed during the development of the disease, even suicidal. Computer ham radio has given him something to be interested in and cheered him up considerably. The problem is that his monitor died.

I asked Jim for a little more information about the monitor and about Mike. Here are the pertinent parts of his letter:

"Treatment is complicated for the victim (Mike) since he
"is a Medicaid patient and totally dependent upon the
"welfare system. His father had a stroke in July and now
"they are both in the Crestview Care Center!

"Briefly, Mike (age 33) started MS with rapid onset
"about four or five years ago. The course was
"precipitous and at age 30 he was placed on a permanent
"basis in the Care Center. The only treatment I know of
"other than the initial diagnosis and testing as an
"employee of GP Express Airlines has been an extended
"course of antibiotics administered by a physician from
"the Veterans' hospital in Hot Springs. It was
"unsuccessful. Deterioration has been very slow in the
"past two years and I notice slurring of the speech
"increasing slightly and loss of muscle tone in his legs
"since he sort of drags his wheelchair along with his
"heels and now will accept a push where he refused help
"when I first met him. He is a stubborn one... Needless
"to say, ham radio gives him something to get up to each
"day and he spends a great deal of time snooping through
"the packet BBs throughout the area.

"The monitor that fried was a Samsung 14" color using a
"composite color input and a sound input compatible with
"the Commodore 64 computer system. Repairs are not
"possible as parts are no longer made for that monitor
"so Mike is still squinting at a 9" B&W.

I'm posting this because Jim isn't tied into the internet. If you can help, please contact Jim McCafferty, POB 68, Whitney, Nebraska, 69367. (Sorry I don't have his phone number.)

156. PK90 Numeric Link States?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-23 18:21:00 UTC
From: hhallika@tuba.calpoly.edu
Message-ID: <1993Aug23.182100.109533@zeus.calpoly.edu>
Source record: 51642

I'm working on a project that uses the AEA PK90 in host mode.
The PK90 responds to a CO command with a numeric link state (among
other things). From the manual, page 6-8, the first returned parameter
is the link state -1, e.g., S05 is sent as $34. So, what are the
various numeric link states? I can't find them in the manual. So far,
it looks like a returned $34 is CONNECTED. What other states are there?

Thanks!

Harold

157. Re: Dumb Terminal hates RF

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-23 18:33:37 UTC
From: gary@ke4zv.uucp
Message-ID: <1993Aug23.183337.19467@ke4zv.uucp>
Source record: 51643
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.packet

In article <CMM.0.90.4.746108313.hcheyney@magnus.acs.ohio-state.edu>
hcheyney@magnus.acs.ohio-state.EDU (Harold E Cheyney) writes:
>RF from my HF rig at some frequencies, 20m in particular causes my dumb
>terminal to lock up. I have to turn it off and back on to get it working
>again. This makes HF digital operation impossible on those bands. Ohter
>bands are ok. Disconnecting the keyboard and I/O cables doesn't prevent it
>but moving the terminal several feet away does cure it. There may be a little
>radiation from the ladder line feed line on the rig. I need to use this type
>feedline since I am using an "all band dipole" feed with a transmatch.
>
>Any ideas?

Do you change electrical outlets when you move the terminal?

It's most likely that the stray RF is getting in by way of the
power wiring. If running your terminal from a different outlet
helps, do it. You can also try winding the power cord around
a ferrite core.

Do you have a *good* RF ground at your transmatch on 20 meters?

Most "hot" chassis problems come from not having a low impedance
ground connection. Your "balanced" line shouldn't radiate, but
it may if it's unbalanced by passing too close to metallic objects.
Look at how you are routing cables in the hamshack. You should
avoid parallel runs. You may find that adding a counterpoise
wire for 20 meters will eliminate much of your problem.

Gary

--
Gary Coffman KE4ZV |"If 10% is good enough | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | for Jesus, it's good | uunet!rsiatl!ke4zv!gary
534 Shannon Way | enough for Uncle Sam."| emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -Ray Stevens |

158. TNC-2 Debug Help Needed

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-23 22:47:31 UTC
From: drsmith@uts.EDU.AU
Message-ID: <25bhe3$jqo@sequoia.itd.uts.EDU.AU>
Source record: 51644
Cross-posted to: aus.radio,rec.radio.amateur.digital.misc

Now I cant get digital or analog loopback to work. I am at WITT's END.

I have replaced the z80-cpu, z80sio, State MAchine (u5 and u6), u10(clock inverter) and some other parts,,

The lights now light up correctly (U10 and the CPU were dead by the way)
The loopback lights work how they should.... (no connect or DCD)
I have the paramaters
my vk2tds
frack 1
retry 0
full on
c vk2tds

The TXD data appears to be going out (It looks like 10000000100000001000000 on my 5MHz cro) and the signal appears how I think it should at JMP-10

There is a signal getting through to SIO pins 12 and 13

Can anyone offer any help please? IS there any way to do a digital loopback any other way - e.g. Jmp11 to j4 pin 13?

I am at a loss. Please help...

Thanks

Darryl Smith
cadet Electrical Engineer
vk2tds
Australia

159. Re: Small TNC

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-24 00:46:00 UTC
From: evan@ve6kik.ampr.ab.ca
Message-ID: <m0oUmWz-0004TDC@ve6mgs.ampr.ab.ca>
Source record: 51653

There is also the Kantronics KPC-3 which is fairly small
21mm X 133mm X 133mm (slighly larger than a pack of Cigarettes)
It will also run from a 9volt battery or rechagable 9 volt
battery. It's also relatively inexpensive $164.00 with GST
(That's Canadian available in Alberta!).

I've had good luck with the unit that I picked up about a year ago.
I use mine with an ICOM IC-24at handhelp, and the computer of a friend
when I travel, or at work. I have even run tcp/ip thru it for a
display at the local hamfest. It was connecting thru a vhf 1200 baud to
9600 baud gateway with no problems.

One of the locals (ve6bos) is using his with a palm top xt that is not
much bigger that the tnc. He travels for work, and uses his almost
everyday on battery power.

73
Evan E. Idler
VE6EEI
VE6EEI@VE6EEI.AMPR.AB.CA
EVAN@VE6KIK.AMPR.AB.CA
EVAN@NEBULUS.AMPR.AB.CA

Wives are like fishermen, they brag about the ones that got away and
complain about the one they caught!!!!!

160. Need APLINK

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-24 09:13:39 UTC
From: lowell@techbook.techbook.com
Message-ID: <25cm43$af7@techbook.techbook.com>
Source record: 51645

I am looking for the latest version of APLINK. Archie doesn't find it. Is there a site I can ftp it from?

Please reply to lbrunson@rodgers.rain.com

tnx. Lowell

--

Lowell Brunson - (packet radio: kc7dx@k7iqi.or.usa.na
Internet: lbrunson@rodgers.rain.com - or - lowell@techbook.com
Public Access User --- Not affiliated with TECHbooks

161. Re: TCP/IP and unix machines

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-24 17:26:41 UTC
From: ewing@minerva.cis.yale.edu
Message-ID: <1993Aug24.172641.2213@news.yale.edu>
Source record: 51646

Stephen C. Trier (trier@odin.ins.cwru.edu) wrote:

: I suppose one could get fancy and use Kerberos. Would that violate the
: Part 97 ban on encrypted traffic?

There are other methods that might be more practical. What you need
is a "back channel" - like US Mail. A simple method would be to have
a password that changes every 10 minutes according to the written
schedule. A little more complicated would be to have the Unix machine
send a random number that you use to index into your printed password
list, and you send back what you see there. Some installations use
a "smart card" device that performs a time-dependent translation
like this. Pretty much unbeatable even over a public channel.

: Stephen

: --
: Stephen Trier (trier@ins.cwru.edu - MIME OK)
: Network Software Engineer
: IRIS/INS/T
: Case Western Reserve University

Martin Ewing AA6E ewing-martin@yale.edu
Yale Univ. Science & Engineering Computing Facility

162. FAXCAP

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-24 22:44:00 UTC
From: v087jsfu@ubvms.cc.buffalo.edu
Message-ID: <CCACCy.H7y@acsu.buffalo.edu>
Source record: 51647

Anybody have a "Faxcap" product? Is this the same as BayPac?

163. Gracilis help?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-25 12:07:37 UTC
From: bwm@st.simbirsk.su
Message-ID: <1993Aug25.120737.25465@stc.simbirsk.su>
Source record: 51652
Cross-posted to: rec.radio.misc,rec.radio.amateur.packet,rec.radio.amateur.digital.misc

```
Hello all,
I am trying to attach Gracilis PackeTwin controller to UNIX software:
ISC 3.0 or 386BSD but look like I need driver for this device. Can
anyone help with it?

Please crosspost your respond's to: bwm@stc.simbirsk.su

--
Vladimir Barmin
```

164. Need APLINK

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-25 15:28:30 UTC
From: jangus@skyld.tele.com
Message-ID: <746292510snx@skyld.tele.com>
Source record: 51650

In article <25cm43$af7@techbook.techbook.com> lowell@techbook.techbook.com writes:

>
> I am looking for the latest version of APLINK. Archie doesn't find it. Is
> there a site I can ftp it from?

Call the HAL Devices Technical Support BBS.
1 (217) 367-5547

Lots of stuff there relating to RTTY, AMTOR and APLINK. But then you have to
dial the number and pay for a phone call to Urbana IL.

73 es GM from Jeff

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "It is difficult to imagine our
Internet: jangus@skyld.tele.com | universe run by a single omni-
US Mail: PO Box 4425 Carson, CA 90749 | potent god. I see it more as a
Phone: 1 (310) 324-6080 | badly run corporation."

165. CW Memory Keyboard for a 486 PC

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-25 17:16:50 UTC
From: Paul_Adler.NER-OSM@xerox.COM
Message-ID: <"25-Aug-93.13:16:50.EDT".*.Paul_Adler.NER-OSM@Xerox.com>
Source record: 51649

Does anyone have a software program to run on my 486 PC to emulate some of the features of the AEA MM-3 keyer?

Thanks Paul KW1L

PAUL_ADLER.NER-OSM@XEROX.COM

166. AOR AR-210 TNC

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-25 23:27:25 UTC
From: billd@piton.Corp.Sun.COM
Message-ID: <25gsgt$n6n@jethro.Corp.Sun.COM>
Source record: 51651
Cross-posted to: rec.radio.amateur.packet,rec.radio.amateur.digital.misc

Does anyone have any experiences, positive or negative, with the AOR AR-210 TNC?
I am considering using it with a 386/486 notebook computer for portable operation.
I'll probably run ka9q or other package to enable me to use tcp/ip as well as
ax.25.

--
Bill Dorsey N3LMF
PGP 2.X public key
available on request

167. Modem TX over one way radio

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-26 08:25:19 UTC
From: A.Cotroneo@it12.bull.it
Message-ID: <9308260823.AA19258@quickt2.it12.bull.it>
Source record: 51655

I am going to experiment with TX only data transmissions using standad
modems (e.g. ZyXel/USR Robotics) over a one way radio link. I just wonder if
that would be possible at all with which parameter(s) setting since there will
be no modem on the other side of the line to negotiate the protocol with.

Very basically imagine a system where a broadacst station would transmitt
data for short periods of the day using e.g. V22bis or higher speed over
the air, and from the other side there would be radio receivers connected
to your PC modems which would decode the data.
Would that be technically and cheaply possible at all, on both RX and TX
side?

Any comment gladly appreciated, before I start my own experiments (g).

If there is interest I will summarize. Please e-mail directly since I do
not receive all feeds over this group. Thanks.

--
Alfredo E. Cotroneo, Bull HN Italia, I-20010 Pregnana MI, Italy /|||||||\
work: A.Cotroneo@it12.bull.it (o o)
personal: 100020.1013@compuserve.com |
phone: +39-2-6779 8314 / 8427 | fax: +39-2-6779 8289 \ _/ /

168. Re: Modem TX over one way radio

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-26 12:22:24 UTC
From: rich@mulvey.com
Message-ID: <930826.082224.2M2.rusnews.w165w@mulvey.com>
Source record: 51656

A.Cotroneo@it12.bull.it (Alfredo Cotroneo) writes:

>
> I am going to experiment with TX only data transmissions using standad
> modems (e.g. ZyXel/USR Robotics) over a one way radio link. I just wonder if
> that would be possible at all with which parameter(s) setting since there wil
> l
> be no modem on the other side of the line to negotiate the protocol with.
>
> Very basically imagine a system where a broadacst station would transmitt
> data for short periods of the day using e.g. V22bis or higher speed over
> the air, and from the other side there would be radio receivers connected
> to your PC modems which would decode the data.
> Would that be technically and cheaply possible at all, on both RX and TX
> side?
>
> Any comment gladly appreciated, before I start my own experiments (g).
>
--
Well... there are a couple of problems with this. It sounds like you
don't intend to use any sort of error-detection/correction. Just consider
what may happen to the data stream when the janitor turns on his
vacuum cleaner. :-)

Additionally, if you are going to use the amateur bands, it's usually not
a good idea to use the term 'broadcast' lest you enjoy getting flames. ;-)

- Rich

--
Rich Mulvey Amateur Radio: N2VDS 787 Elmwood Terrace
rich@mulvey.com Rochester, NY 14620

169. Re: Your packet network?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-26 15:48:50 UTC
From: mark@icsbelf.co.uk
Message-ID: <CCDILE.615@icsbelf.co.uk>
Source record: 51657
Cross-posted to: rec.radio.amateur.digital.misc,uk.radio.amateur

In article <CCDAsq.292@hermes.hrz.uni-bielefeld.de> bsieker@techfak.uni-bielefeld.de (Bernd Sieker) writes:
>In article <CCD90F.CxH@icsbelf.co.uk>, mark@icsbelf.co.uk (Mark Willis) writes:
>
> [stuff about lack of 2m packet frequencies deleted]
>|>
>|> The real problem is having nodes AND bbs's on 650.
>
>No, it's not! The real problem is that you want to use 2m for a packet
>network.
>
>So why on earth would you want a complete packet network on 2m?

I dont. Thats the point of the question... I want to know what everyone else does INSTEAD of having links on 2m!

>In Germany nearly all user access frequencies are on 70cm and
>links are mainly on 70cm and 23 cm, some are already at 13cm.

Most packet users only have 2m and it would be unreasonable of us to force them onto 70cm, so we need primary access on that band. Also, we can't use 23cms here, cos some other guys already have it...

(Followups redirected to rec.radio.amateur.digital.misc)

-Mark
--
Mark Willis Internet: mark@icsbelf.co.uk
ICS Computing Group Ltd. Packet: GI0PEZ@GB7TED.#63.GBR.EU
Belfast AmprNet: 44.131.15.3
Northern Ireland

170. Re: Your packet network?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-26 18:33:09 UTC
From: dave@llondel.demon.co.uk
Message-ID: <746415189snx@llondel.demon.co.uk>
Source record: 51661
Cross-posted to: rec.radio.amateur.digital.misc,uk.radio.amateur

In article <CCD90F.CxH@icsbelf.co.uk> mark@icsbelf.co.uk (Mark Willis) writes:
>
>There is a possibilty thet the packet network in GI will be overhauled in
>the near future. We suffer from enormous congestion problems in 144.650, but
>there is little traffic on the other 2m freqs. (so far)
>
>What I need to know is how is the packet network arranged in your area? The
>main problem seems to be a lack of freqs on 2m, the bandplan being:
>
> 144.625 TCP/IP
> 144.650 BBS and Network access
> 144.675 PacketCluster
>
>The real problem is having nodes AND bbs's on 650. How does the network
>in your area get around this problem? Also, what type of links do you run,
>and at what speed?
>
The network in parts of England (not sure about Scotland, Wales and the
various smaller islands) is vastly improved over a few years ago. I can
connect on dedicated links from Bristol all the way up to Yorkshire, and if
I looked hard enough, I reckon I could get to Scotland if a certain link
reappeared. Apart from one link, which recently got clobbered by a
lightning strike, I think it is 9600baud all the way from Bristol to
Emley Moor, and perhaps beyond. All this is taking place on 70cms and 23cms.

The recommendations for networking are to put links on 430 and 439MHz in
the 70cms band, with the 432 and 433MHz freqs allocated for user access. Other
links can go on 1240/1299MHz, and on higher bands if you can manage it. There
should be no linking on 2M unless you are in a very quiet location. By doing
this, and coordinating user access frequencies, it is possible to end up with
nine user access frequencies (three on 2M, six on 70cm), plus possibly three
or four on 4M, depending on local usage of that band.

The best way of doing links may well be to run full-duplex, so that a given
site can have all its transmitters in one sub-band, and have receivers in
another sub-band (local example: GB7BH will transmit to all its neighbours on
1299MHz and receive from them on different 439MHz frequencies, so eliminating
hidden-station effect).

You may need site clearance for non-2M stuff to be legal, but the sooner you
apply for it, the quicker it will arrive. In the area around Bristol, there
are very few properly integrated nodes which have not got site clearance, and
frequencies have been juggled so that those nodes operate on frequencies
covered under the normal UK licence (5 nodes out of 19).

For the benefit of non-UK stations, 'site clearance' is a wonderful procedure which has to be used in the UK to get permission to operate unattended stations (which may be at home or at remote sites) on certain bands, most notably 70cms and 23cms, although some recent relaxation in the rules has made parts of 70cms a bit easier to use. The time taken for site clearance varies from two months (best ever recorded) to over two years. This may explain a bit of the background to the UK using mainly 2M for packet operation, because it does not have these problems.

Dave

****
* G4WRW @ GB7WRW.#41.GBR.EU AX25 * Start at the beginning. Go on *
* dave@llondel.demon.co.uk Internet * until the end. Then stop. *
* g4wrw@g4wrw.ampr.org Amprnet * (the king to the white rabbit) *
****

171. Comments please on MFJ 1270B and 1274 TNC's

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-26 19:58:01 UTC
From: tjf@beta.lanl.gov
Message-ID: <1993Aug26.195801.27486@newshost.lanl.gov>
Source record: 51658
Cross-posted to: rec.radio.amateur.packet,rec.radio.amateur.digital.misc

I am about to take the plunge into packet. I've got the radio, the antenna, a Mac (also an Amiga). Now I need a TNC. The MFJ units seem to have some nice features, and the price is low. How do they work? Compared to BayPac, PMP, etc. Is there something I can adapt to my Amiga? How is Savant for the Mac? So many questions, so little time...

Thanks for any info!

Tom
KJ5LT

PS. I am most interested in VHF, but HF looks interesting as well.

172. MSYS 1.15 + TheNet 2.08B

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-27 03:20:55 UTC
From: jcox@lakes.trenton.sc.us
Message-ID: <kDXw9B3w165w@lakes.trenton.sc.us>
Source record: 51660

I am trying to milk a little more life out of my 8088 MSYS box before I have to convince the wife I need a new motherboard :-). What I would like to do is use a TheNet equipped MFJ 1274 connected to MSYSB (the small version) in order to continue with the node and free more memory. I have hooked the node tnc and computer together per the MSYS docs (2,3,7, and pins 10 & 23 jumpered on TNC - straight through cable). I have also added the > in the port statement. Nothing seems to be talking, though. Anyone successfully running a single node TNC with MSYS?

Thanks and 73,
John Cox, WD4PKZ/AFA2TS USAF MARS

173. Re: FAXCAP

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-27 16:05:40 UTC
From: vern_suter@pigeon.cpg.cdc.com
Message-ID: <vern_suter-270893100540@mac_arhbld3n2_147.subnet66.cdc.com>
Source record: 51662

In article <CCACCy.H7y@acsu.buffalo.edu>, v087jsfu@ubvms.cc.buffalo.edu (Danny Anderson) wrote:

> Anybody have a "Faxcap" product? Is this the same as BayPac?

I have one of the Faxcap units. It receives digital signals such as weather fax, RTTY, CW, etc. When I bought it, some shareware was included to enable decoding these signals. The one I received was designed for receiving only. With the right software, I believe you could monitor packet but not transmit. It isn't equivalent to the BayPac. Hope this helps.

--
Vern Suter phone: (612) 482-4810
Control Data System, Inc. email: vern_suter@pigeon.cpg.cdc.com

174. Re: Comments please on MFJ 1270B and 1274 TNC's

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-27 19:28:42 UTC
From: alanb@sr.hp.com
Message-ID: <CCFnFu.ArL@srgenprp.sr.hp.com>
Source record: 51663
Cross-posted to: rec.radio.amateur.packet,rec.radio.amateur.digital.misc

Tom J Farish (tjf@beta.lanl.gov) wrote:
: I am about to take the plunge into packet. I've got the radio, the antenna,
: a Mac (also an Amiga). Now I need a TNC. The MFJ units seem to have some
: nice features, and the price is low. How do they work? Compared to BayPac,
: PMP, etc. Is there something I can adapt to my Amiga? How is Savant for
: the Mac? So many questions, so little time...

The 1270 is a more-or-less standard clone of the TAPR TNC-2. It's fine
if all you want is a standard packet TNC.

The 1274 is a multi-mode modem. The hardware is very simple -- a rather
crude PLL type modulator/demodulator with raw serial input/output to
two of the miscellaneous control lines of the serial interface to the
host computer. ALL the decoding is done by a software program (supplied)
in the host PC. This means you MUST use a standard IBM clone.

Note that the 1274 does not use the TXD and RXD bits to send and recieve
the serial data, but uses some handshake lines (I forget which ones)
with the PC doing some kind of parallel poll to do the decoding.
This means if your PC's serial interface is in any way non-standard,
it might not work. Mine didn't. I later found out that one of the
wires on the connector was mis-wired. However, it worked fine with
my Hayes-compatible modem and my Kantronics TNC.

The 1274 has no pre-filtering of the received signal. To get decent
performance on RTTY, CW, FAX, etc. I would recommend some kind of
external filter ahead of the unit. Either selectible IF filters in
your HF transceiver or perhaps a variable-bandwidth audio filter
like the W9GR DSP unit.

AL N1AL

175. Passed test, what do I do now?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-28 01:01:33 UTC
From: mvp@netcom.com
Message-ID: <mvpCCG2uL.5Cr@netcom.com>
Source record: 51664
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc

A few weeks ago, I passed the test for Technician No-Code, and the examiners sent my application off to FCC Land, where it's currently in a holding pattern.

So, while waiting for my license, I'm looking at radios and such.

Where's a good place to start to find out about what's going on? 2-meter, naturally, for voice and packet. What about 70cm? 23cm?

Currently I'm thinking along the lines of a dual band 2m/70cm handheld that receives outside the ham bands, and a TNC for packet.

What about baud rates? 1200 baud sounds horribly slow to me since I have v.32bis on my computer, but the few people I've talked to say 1200 baud is The Standard for packet. What's the modulation for digital? It wouldn't happen to be the same as for phone modems, would it? Could I use my regular modem for a TNC?

What are good handhelds for limited bucks, and which ones should I stay away from? (I've seen a number of flames at Kenwood.)

Is there a list of acronyms somewhere? (It took me a while to figure out what an "HT" was.)

(Maybe I'll have my license by Christmas...)

--
Mike Van Pelt | What happens if a big asteroid hits Earth?
mvp@netcom.com | Judging from realistic simulations involving a
| sledge hammer and a common laboratory frog, we
| can assume it will be pretty bad. -- Dave Barry

176. Guide to the Personal Radio Newsgroups

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-28 15:17:41 UTC
From: pschleck@unomaha.edu
Message-ID: <radio/personal-intro-1-746551053@unomaha.edu>
Source record: 51665
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.packet,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.info,rec.answers,news.answers

```
Posted-By: auto-faq 2.4
Archive-name: radio/personal-intro
Revision: 1.4 06/30/93 12:04:14
Changes: new rec.radio.amateur.* newsgroups, cs.utexas.edu gateway

(Note: The following is reprinted with the permission of the author.
Due to the recent reorganization, it is also on a temporarily-
accelerated posting schedule as follows:

July weekly
August bi-weekly
September back to monthly)

This message describes the rec.radio.amateur.*, rec.radio.cb, rec.radio.info,
and rec.radio.swap newsgroups. It is intended to serve as a guide for the new
reader on what to find where. Questions and comments may be directed to the
author, Jay Maynard, K5ZC, by Internet electronic mail at
jmaynard@oac.hsc.uth.tmc.edu. This message was last changed on 30 June 1993 to
add the groups created during the latest reorganization vote and the
description of the cs.utexas.edu gateway.

History
=======

Way back when, before there was a Usenet, the Internet hosted a mailing list
for hams, called (appropriately enough) INFO-HAMS. Ham radio discussions
were held on the mailing list, and sent to the mailboxes of those who had
signed up for it. When the Usenet software was created, and net news as we
now know it was developed, a newsgroup was created for hams: net.ham-radio.
The mailing list and the newsgroup were gatewayed together, eventually.

As the net grew, and as packet radio came into vogue, packet discussion began
to dominate other topics in the group and on the list. This resulted in the
logical solution: a group was created to hold the packet discussion, and
another corresponding mailing list was created as well: net.ham-radio.packet
and PACKET-RADIO, respectively.

These two groups served for several years, and went through Usenet's Great
Renaming essentially unchanged, moving from net.ham-radio[.packet] to
rec.ham-radio[.packet]. Readership and volume grew with the rest of the
network.

The INFO-HAMS mailing list was originally run from a US Army computer at
White Sands Missile Range, SIMTEL20. There were few problems with this
```

arrangement, but one was that the system was not supposed to be used for commercial purposes. Since one of hams' favorite pastimes is swapping gear, it was natural for hams to post messages about equipment for sale to INFO-HAMS/rec.ham-radio. This ran afoul of SIMTEL20's no-commercial-use restriction, and after some argument, a group was created specifically for messages like that: rec.ham-radio.swap. This group wasn't gatewayed to a mailing list, thus avoiding problems.

While all this was happening, other folks wanted to discuss other aspects of the world of radio than the personal communications services. Those folks created the rec.radio.shortwave and rec.radio.noncomm newsgroups, and established the precedent of the rec.radio.* hierarchy, which in turn reflected Usenet's overall trend toward a hierarchical name structure.

The debate between proponents of a no-code ham radio license and its opponents grew fierce and voluminous in late 1989 and 1990. Eventually, both sides grew weary of the debate, and those who had not been involved even more so. A proposal for a newsgroup dedicated to licensing issues failed. A later proposal was made for a group that would cover the many recurring legal issues discussions. During discussion of the latter proposal, it became clear that it would be desirable to fit the ham radio groups under the rec.radio.* hierarchy. A full-blown reorganization was passed by Usenet voters in January 1991, leading to the overall structure we now use.

After the reorganization, more and more regular information postings began to appear, and were spread out across the various groups in rec.radio.*. Taking the successful example of the news.answers group, where informational postings from across the net are sent, the group rec.radio.info was created in December, 1992, with Mark Salyzyn, VE6MGS, initially serving as moderator.

In January, 1993, many users started complaining about the volume in rec.radio.amateur.misc. This led to a discussion about a second reorganization, which sparked the creation of a mailing list by Ian Kluft, KD6EUI. This list, which was eventually joined by many of the most prolific posters to the ham radio groups, came up with a proposal to add 11 groups to the rec.radio.amateur hierarchy in April 1993. The subsequent vote, held in May and early June, approved the creation of five groups: rec.radio.amateur.digital.misc (to replace .packet), .equipment, .homebrew, .antenna, and .space.

The Current Groups

I can hear you asking, "OK, so this is all neat history, but what does it have to do with me now?" The answer is that the history of each group has a direct bearing on what the group is used for, and what's considered appropriate where.

The easy one is rec.radio.amateur.misc. It is what rec.ham-radio was renamed to during the reorganization. Any message that's not more appropriate in one of the other groups belongs here, from contesting to DX to ragchewing on VHF to information on becoming a ham.

The group rec.radio.amateur.digital.misc is for discussions related to (surprise!) digital amateur radio. This doesn't have to be the common two-meter AX.25 variety of packet radio, either; some of the most knowledgeable folks in radio digital communications can be found here, and anything in the general area is welcome. The name was changed to emphasize this, and to encourage discussion not only of other text-based digital modes, such as AMTOR, RTTY, and Clover, but things like digital voice and video as well. The former group, rec.radio.amateur.packet, has not been removed as of this writing, but it is obsolete, and you should use .digital.misc instead. The group has the .misc as part of the name to allow further specialization if the users wish it, such as .digital.tcp-ip.

The swap group is now rec.radio.swap. This recognizes a fact that became evident shortly after the original group was formed: Hams don't just swap ham radio gear, and other folks besides hams swap ham equipment. If you have radio equipment, or test gear, or computer stuff that hams would be interested in, here's the place. Equipment wanted postings belong here too. Discussions about the equipment generally don't; if you wish to discuss a particular posting with the buyer, email is a much better way to do it, and the other groups, especially .equipment and .homebrew, are the place for public discussions. There is now a regular posting with information on how to go about buying and selling items in rec.radio.swap; please refer to it before you post there.

The first reorganization added two groups to the list, one of which is rec.radio.amateur.policy. This group was created as a place for all the discussions that seem to drag on interminably about the many rules, regulations, legalities, and policies that surround amateur radio, both existing and proposed. The neverending no-code debate goes here, as does the New Jersey scanner law, the legality of ordering a pizza on the autopatch, what a bunch of rotten no-goodniks the local frequency coordinating body is, and so on.

The other added group is rec.radio.cb. This is the place for all discussion about the Citizens' Band radio service. Such discussions have been very inflammatory in rec.ham-radio in the past; please do not cross-post to both rec.radio.cb and rec.radio.amateur.* unless the topic is genuinely of interest to both hams and CBers - and very few topics are.

The rec.radio.info group is just what its name implies: it's the place where informational messages from across rec.radio.* may be found, regardless of where else they're posted. As of this writing, information posted to the group includes Cary Oler's daily solar progagation bulletins, ARRL bulletins, the Frequently Asked Questions files for the various groups, and radio modification instructions. This group is moderated, so you cannot post to it directly; if you try, even if your message is crossposted to one of the other groups, your message will be mailed to the moderator, who is currently Mark Salyzyn, VE6MGS. The email address for submissions to the group is rec-radio-info@ve6mgs.ampr.ab.ca. Inquires and other administrivia should be directed to rec-radio-request@ve6mgs.ampr.ab.ca. For more information about rec.radio.info, consult the introduction and posting guidelines that are regularly posted to that newsgroup.

The groups rec.radio.amateur.antenna, .equipment, .homebrew, and .space are for more specialized areas of ham radio: discussions about antennas, commercially-made equipment, homebrewing, and amateur radio space operations. The .equipment group is not the place for buying or selling equipment; that's what rec.radio.swap is for. Similarly, the .space group is specifically about amateur radio in space, such as the OSCAR program and SAREX, the Shuttle Amateur Radio EXperiment; other groups cover other aspects of satellites and space. Homebrewing isn't about making your own alcoholic beverages at home (that's rec.crafts.brewing), but rather construction of radio and electronic equipment by the amateur experimenter.

The rec.radio.amateur.misc, .packet, and .policy groups, and the rec.radio.info group, are available by Internet electronic mail in digest format; send a mail message containing "help" on a line by itself to listserv@ucsd.edu for instructions on how to use the mail server. The rec.radio.swap group is not available for reading by electronic mail. At this writing, the most recently added groups are also not available for reading by electronic mail, although that may change.

All of the groups can be posted to by electronic mail, though, by using a gateway at the University of Texas at Austin. To post a message this way, change the name of the group you wish to post to by replacing all of the '.'s with '-'s - for example, rec.radio.swap becomes rec-radio-swap - and send to that name@cs.utexas.edu (rec-radio-swap@cs.utexas.edu, for example). You may crosspost by including multiple addresses as Cc: entries (but see below). This gateway's continued availability is at the pleasure of the admins at UT-Austin, and is subject to going away at any time - and especially if forgeries and other net.abuses become a problem. You have been warned.

A Few Words on Crossposting
===========================

Please do not crosspost messages to two or more groups unless there is genuine interest in both groups in the topic being discussed, and when you do, please include a header line of the form "Followup-To: group.name" in your article's headers (before the first blank line). This will cause followups to your article to go to the group listed in the Followup-To: line. If you wish to have replies to go to you by email, rather than be posted, use the word "poster" instead of the name of a group. Such a line appears in the headers of this article.

One of the few examples of productive cross-posting is with the rec.radio.info newsgroup. To provide a filtered presentation of information articles, while still maintaining visibility in their home newsgroups, the moderator strongly encourages cross-posting. All information articles should be submitted to the rec.radio.info moderator so that he may simultaneously cross-post your information to the appropriate newsgroups. Most newsreaders will only present the article once, and network bandwidth is conserved since only one article is propagated. If you make regular informational postings, and have made arrangements with the moderator to post directly to the group, please cross-post as appropriate.

--
Jay Maynard, EMT-P, K5ZC, PP-ASEL | Never ascribe to malice that which can
jmaynard@oac.hsc.uth.tmc.edu | adequately be explained by stupidity.
"If my car ran OS/2, it'd be there by now" -- bumper sticker
GCS d++ p+ c++ l+ m+/- s/++ g++ w++ t+ r

--
73, Paul W. Schleck, KD3FU

pschleck@unomaha.edu

Celebrating 60 years of the Univ. of Maryland ARA - W3EAX (1933-1993)

177. KPC-3 and DJ-580

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-28 23:37:00 UTC
From: v242z3j9@ubvms.cc.buffalo.edu
Message-ID: <CCHtHz.BK2@acsu.buffalo.edu>
Source record: 51666

Tonight I made the cable that goes between the Kantronics
KPC-3 and the Alinco DJ-580.... I followed the Yaesu skematic,
but unfortunately when I tested it out, PTT was always on :(
According to the skematic, a 2.2k ohm resister is used... Is
that the problem? Should I use a different resister? 3.9k ohm?
Other than that the cable works... It tx's and rx's (if I remove
the Mic plug)... TKS for the help...

178. Re: KPC-3 and DJ-580

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-29 03:08:44 UTC
From: jfh@netcom.com
Message-ID: <jfhCCI3EK.Jxr@netcom.com>
Source record: 51667

v242z3j9@ubvms.cc.buffalo.edu (V242Z3J9) wrote:
>Tonight I made the cable that goes between the Kantronics
>KPC-3 and the Alinco DJ-580.... I followed the Yaesu skematic,
>but unfortunately when I tested it out, PTT was always on :(
>According to the skematic, a 2.2k ohm resister is used... Is
>that the problem? Should I use a different resister? 3.9k ohm?
>Other than that the cable works... It tx's and rx's (if I remove
>the Mic plug)... TKS for the help...

The Yaesu is non-standard in its wiring - I've tried other 3-rd party
accessories that end up not working. Try the Icom value of 3.9. Your
Alinco diagram doesn't give an example?

--

Jack Hamilton jfh@netcom.com kd6ttl@n0ary.#nocal.ca.us.na packet
Post Office Box Box 281107 San Francisco, California 94128 USA

179. Re: Passed test, what do I do now?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-30 02:56:09 UTC
From: gsmlrn@gsm001.mendelson.com
Message-ID: <1993Aug30.025609.1204@gsm001.mendelson.com>
Source record: 51668
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc

In article <mvpCCG2uL.5Cr@netcom.com> mvp@netcom.com (Mike Van Pelt) writes:

>A few weeks ago, I passed the test for Technician No-Code, and the
>examiners sent my application off to FCC Land, where it's currently
>in a holding pattern.

Congadulations, welcome, OM.

>So, while waiting for my license, I'm looking at radios and such.

Do more than look, buy one and listen. Learn how to act (and how not to)
on the radio. Learn the jargon and the protocol.

>Where's a good place to start to find out about what's going on?

Your nearest 2 meter repeater. Or your local ham club. Or look for a house
with lots of antennas, knock on the door and introduce yourself.

Where did you take the test? Try calling the head VE and ask to be pointed
in the right direction.

If you are in the Philadelphia area, give me a ring.

>2-meter, naturally, for voice and packet. What about 70cm? 23cm?

2 meter's is a good place to start. I enjoy talking to people on the
local repeaters, some packet (haven't quite gotten an IP address for
TCP/IP so I just use "regular" packet and working DX on 2 meter SSB.

I also heard MIR (CIS (ex- USSR) space station) on packet today. I missed
having my tnc set up so I didn't get to connect. They are on 145.550 (FM)
and usually run packet during the week and voice on weekends/holidays.
Note that they mean CIS time and holidays, not your local time.

You can talk to them when no-one is around (try 5am or mid week day passes)
outdoors with an HT. When things get crouded, you may need a bigger antenna
or more power.

I also know a guy that works the sattelites regulary. He used a 10 watt
out Yaesu ft-726r (until he got a 736r for a ridiculous price and sold
me the 726), a discone antenna in his attic for uplink and a 2 meter
automobile whip balanced on a barbeque (for the ground plane) sitting
on a small balcony.

Every day, rain or shine, bad propogation or good, sun spots or not,
the satelites are there. You just need to know when.

The 70 cm is actually 3 bands in one. 420-430 is used for atv (I think), 430-440 is used for CW, SSB, and satelite work, 440-450 is used for FM repeaters.

I've been told that there is a "better class of ham" on 440, but around here, (philadelphia, pa.) it's mostly linked 2 meter repeaters and the same guys as on 2 meters using their new dual band rigs. :-)

I expect there will be more growth on 220 and 902 before 1.2ghz because there is now a "use it before you loose it" urgency on those bands.

>Currently I'm thinking along the lines of a dual band 2m/70cm handheld
>that receives outside the ham bands, and a TNC for packet.

The only problen with that is the out of band receive usually makes the radio susceptable to intermod. In the city it is a problem, outside it is not.

>What about baud rates? 1200 baud sounds horribly slow to me since I
>have v.32bis on my computer, but the few people I've talked to say 1200
>baud is The Standard for packet. What's the modulation for digital?
>It wouldn't happen to be the same as for phone modems, would it? Could
>I use my regular modem for a TNC?

No, although the 1200 baud modems were based on Bell designs (and equipment) the 2400, 9600 and 19200 are not. You also need specialy modified radios for 9600 and above. There is lots of 1200 baud activity, not much 2400 baud, and many 9600 links, but the majority is 1200 baud. If you want high speed stick to landlines.

>What are good handhelds for limited bucks, and which ones should I stay
>away from? (I've seen a number of flames at Kenwood.)

The radio shack htx-202, now on sale for $200. (I own one, but have no other connection to R/S). I also have an ICOM W2a and a 2sat. I like them all. The 2sat is a good "pocket" rig, It rides the commuter trains with me every day.

>Is there a list of acronyms somewhere? (It took me a while to figure
>out what an "HT" was.)

I've never seen one. Sorry.

Good luck and 73.

Geoff.

P.s. some good habits:

73 is already plural.

Don't use "q" signals on voice (though many hams do).

Don't use "Break" to get into a conversation on a repeater. Although the standard is "Break, break, break" (3 times) for an emergency, many places use one "Break" for emergencies. Just say your COMPLETE call and wait to be acknowledeged. If you need to call somone feel free to interupt a long conversation with "CALL, PLEASE".

--
Geoffrey S. Mendelson N3OWJ
(215) 242-8712
gsm@mendelson.com or uunet!gsm001!gsm

180. Re: Passed test, what do I do now?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-30 10:54:49 UTC
From: gary@ke4zv.uucp
Message-ID: <1993Aug30.105449.16292@ke4zv.uucp>
Source record: 51669
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc

In article <mvpCCG2uL.5Cr@netcom.com> mvp@netcom.com (Mike Van Pelt) writes:
>A few weeks ago, I passed the test for Technician No-Code, and the
>examiners sent my application off to FCC Land, where it's currently
>in a holding pattern.

Congrats.

>So, while waiting for my license, I'm looking at radios and such.
>
>Where's a good place to start to find out about what's going on?
>2-meter, naturally, for voice and packet. What about 70cm? 23cm?

Band usage is area specific. Visit local club meetings, talk to
local amateurs, and find out what's hot in your area. 2 meters
is sure to be populated, but you may feel more at home with the
crowd on 70 cm in your area. It's very locale specific and interest
group specific.

>Currently I'm thinking along the lines of a dual band 2m/70cm handheld
>that receives outside the ham bands, and a TNC for packet.
>
>What about baud rates? 1200 baud sounds horribly slow to me since I
>have v.32bis on my computer, but the few people I've talked to say 1200
>baud is The Standard for packet. What's the modulation for digital?
>It wouldn't happen to be the same as for phone modems, would it? Could
>I use my regular modem for a TNC?

Sadly no. Packet does not use the same tone pairs or modulation
methods as telephone modems. 1200 baud packet uses the Bell 202
standard which is a *half duplex* standard that is not the same
as the Bell 212 standard used in 1200 baud phone modems. Besides,
most phone modems today are "Smartmodems(tm)" that have their
own controlling microprocessors with embedded firmware. That
firmware is *not* compatable with packet TNC firmware.

A good TNC, like the Pac-Comm Tiny 2 or the MFJ-1274, is in the
$120-$140 range new and can often be found used in the $60 range.
Or, you can use the Baycom approach which is a simple single chip
modem attached to your computer with the computer software doing
the TNC function. Unfortunately, such simple systems are speed
limited. If you want to run 9600 or 19,200 baud, you'll need the
real hardware TNC and an add on modem which can run another $100.

>What are good handhelds for limited bucks, and which ones should I stay
>away from? (I've seen a number of flames at Kenwood.)

The RS HT202 is a good 2 meter HT for the money. It's nearly intermod free, and fairly rugged. Better is the Icom G series, but you pay for that better. In dual band HTs, I still like the Yaesu FT-470 which has dropped in price since the newer FT-530 has come out. Alinco, Standard, and Icom also make reasonable dual banders, but all, including the FT-470, suffer from intermod to one degree or another. That seems inherent in wide band HTs. The FT-470 still excells in user interface IMHO, and has excellent power saver features. The features you want in an HT are ruggedness, low intermod, good battery life, and a user friendly control system. The very small HTs usually have limited battery life, aren't very rugged, and often suffer more intermod since there's less room for good filtering. Also, if you have average size fingers, the tiny radios are often difficult to operate and may require bifocals to see. :-)

Gary

--

Gary Coffman KE4ZV |"If 10% is good enough | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | for Jesus, it's good | uunet!rsiatl!ke4zv!gary
534 Shannon Way | enough for Uncle Sam."| emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -Ray Stevens |

181. Re: KPC-3 and DJ-580

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-30 14:10:24 UTC
From: bodoh@dgg.cr.usgs.gov
Message-ID: <1993Aug30.141024.2361@rsg1.er.usgs.gov>
Source record: 51670

In article <CCHtHz.BK2@acsu.buffalo.edu>, v242z3j9@ubvms.cc.buffalo.edu (V242Z3J9) writes:
|> Tonight I made the cable that goes between the Kantronics
|> KPC-3 and the Alinco DJ-580.... I followed the Yaesu skematic,
|> but unfortunately when I tested it out, PTT was always on :(
|> According to the skematic, a 2.2k ohm resister is used... Is
|> that the problem? Should I use a different resister? 3.9k ohm?
|> Other than that the cable works... It tx's and rx's (if I remove
|> the Mic plug)... TKS for the help...

I have the following mod that was posted a few months ago...

Article: 42552 of rec.radio.amateur.misc
Path: rsg1.er.usgs.gov!darwin.sura.net!howland.reston.ans.net!agate!dog.ee.lbl.gov!network
.ucsd.edu!news-mail-gateway
From: michel@bbn.com (Tony Michel)
Newsgroups: rec.radio.amateur.misc
Subject: TNC keys DJ-580
Date: 20 Jul 93 13:45:16 GMT
Organization: UCSD Usenet Gateway
Lines: 14
Message-ID: <9307201333.AA22394@ucsd.edu>
NNTP-Posting-Host: ucsd.edu
Originator: daemon@ucsd.edu

Warren, KD4YRN, complains that his TNC will not key his DJ-580. He says
he tried "various values" of R & C.

Warren - You didn't say what values you tried. I found that with a PacComm Tiny-2
(quite a nice box) I required a resistor no larger than 2.7K to get my DJ-580
to key. As I recall, the recommended value was 5K, but that didn't work. I
didn't fool around with a capacitor, and I didn't use the recommended 3-pin
connector (available where?), so I'm probably wasting some power by shorting
the mike power limiting resistor to ground. But it keys fine, it runs for a
long time on a battery charge, and the radio doesn't get very hot. Try a smaller
pull-down resistor. (Not too small, though!)

AXM
kd1ik

From: saswel@unx.sas.COM (Warren E. Lewis)
Newsgroups: rec.radio.amateur.misc
Subject: Re: TNC <-> DJ-580 interfacing
Date: 20 Jul 93 16:25:03 GMT
Organization: UCSD Usenet Gateway
Lines: 19
Message-ID: <199307201525.AA00521@cardamom.unx.sas.com>

NNTP-Posting-Host: ucsd.edu
Originator: daemon@ucsd.edu

Thanks to all who replied!!

I wound up using a .01mF Cap and a 1.2K Ohm Resistor. Also I discovered
that a .1mF Cap and a Resistor up to about 5K Ohms will work properly
with the DJ-580. At first since it was a 3 conductor plug I was wiring
the PTT to the sleeve and the Mic Audio to the tip. I just assumed
that I needed to use all three connections. Dummy me!! I looked at the
wiring digram in the TNC manual and it had both connections made to the
tip. RTFM right!! Sure enough that was all I needed.

Learning is what this hobby is all about anyway?!

thanks and 73s - Warren

--
Warren E. Lewis saswel@unx.sas.com
Graphics Division (919) 677-8001 x6542
SAS Institute Inc. PP-ASEL
Cary, NC KD4YRN DOD#0021

--
++
+ Tom Bodoh - Sr. systems software engineer, Hughes STX, N0Y?? (in the mail) +
+ USGS/EROS Data Center, Sioux Falls, SD, USA 57198 (605) 594-6830 +
+ Internet; bodoh@dgg.cr.usgs.gov (152.61.192.66) +
+ "Welcome back my friends to the show that never ends!" EL&P +
++

182. Re: Comments please on MFJ 1270B and 1274 TNC's

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-30 15:06:45 UTC
From: w6swe@w6swe.tapr.ORG
Message-ID: <183@w6swe.tapr.org>
Source record: 51671

In Ham-Digital Digest #22, Al, N1AL writes:

>The 1274 is a multi-mode modem. The hardware is very simple -- a rather
>crude PLL type modulator/demodulator with raw serial input/output to two
>of the miscellaneous control lines of the serial interface to the host
>computer. ALL the decoding is done by a software program (supplied) in
>the host PC. This means you MUST use a standard IBM clone.

You must have this confused with something else. The 1274 is
identical to the 1270B, except that a tuning indicator for HF
(similar to the TAPR tuning indicator) has been added.

Bob, w6swe@tapr.org

183. Re: Comments please on MFJ 1270B and 1274 TNC's

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-31 01:28:39 UTC
From: alanb@sr.hp.com
Message-ID: <CCLo3s.2tF@srgenprp.sr.hp.com>
Source record: 51672

Bob Nielsen (w6swe@w6swe.tapr.ORG) wrote:
: In Ham-Digital Digest #22, Al, N1AL writes:

: >The 1274 is a multi-mode modem. The hardware is very simple -- a rather
: >crude PLL type modulator/demodulator with raw serial input/output to two
: >of the miscellaneous control lines of the serial interface to the host
: >computer. ALL the decoding is done by a software program (supplied) in
: >the host PC. This means you MUST use a standard IBM clone.

: You must have this confused with something else. The 1274 is
: identical to the 1270B, except that a tuning indicator for HF
: (similar to the TAPR tuning indicator) has been added.

Yes, I guess I got my model numbers confused. The one I was talking about
is, I think, the MFJ-1278.

As the lady used to say on Saturday Night Live:

"Never mind!"

AL N1AL

184. Re: Gracilis help?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-31 03:25:14 UTC
From: csmall@uts.EDU.AU
Message-ID: <25ugaq$a6l@sequoia.itd.uts.EDU.AU>
Source record: 51673
Cross-posted to: rec.radio.misc,rec.radio.amateur.packet,rec.radio.amateur.digital.misc

bwm@st.simbirsk.su (Vladimir Barmin) writes:

>Hello all,
>I am trying to attach Gracilis PackeTwin controller to UNIX software:
>ISC 3.0 or 386BSD but look like I need driver for this device. Can
>anyone help with it?

I'm going to have a similiar problem, this time with Linux. It looks like
the only viable way (for my programming level) is to kludge something into
Wampes.
I was hopingh there might be a discussion group about the PackeTwins somewhere,
so I don't have to repeat something that (hopefully) someone has already done.

- Craig vk2xlz

--
// /\ | | | | | ... Craig Small [44.136.8.58] ... ...
||==|--|====|====|===|==|=| ... INTERNET: csmall@uts.edu.au ... ...
\\ \/ | | | | | ... AMPR : VK2XLZ@VK2XSB ... ...

185. Welcome to rec.radio.info!

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-31 04:01:47 UTC
From: rec-radio-info@ve6mgs.ampr.ab.ca
Message-ID: <rec.radio.info-welcome_746766090@ve6mgs.ampr.org>
Source record: 51719
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.cb,rec.radio.noncomm,alt.radio.scanner,rec.radio.info,news.answers,rec.answers

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Archive-name: radio/rec-radio-info/welcome
Last-modified: $Date: 1993/05/16 21:57 $
Version: $Revision: 1.05 $

*** Welcome to rec.radio.info! ***

Welcome to rec.radio.info, a group that aims to provide a noise-free source
of information and news for the entire rec.radio hierarchy.

Two introductory articles about rec.radio.info are posted to the group and
to news.answers every two weeks. You are now reading the first article, which
explains what rec.radio.info is, and answers some Frequently Asked Questions.
The second article is titled "Submission Guidelines", and you only need to
read it if you want to submit an article to rec.radio.info.

You can skip to the next section of this article by searching for the next
" -- " string. The sections available are:
- What is the purpose of rec.radio.info?
- Why are messages almost always cross posted to rec.radio.info?
- What is a 'follow-up', and what does 'moderated' mean?
- OK, so now I know what 'moderated' means. Tell me more.
- What type of material is considered inappropriate?
- I do not have access to news, how can I get the information posted to
rec.radio.info?
- Will the material appearing in rec.radio.info be archived somewhere?
- I have a regular posting with timely information, is there a way to
speed up it's delivery, or automate for more convenience?

-- What is the purpose of rec.radio.info?

The purpose or charter of rec.radio.info is to provide the Usenet community with
a resource for information, news, and facts about any and all things radio.

All the other rec.radio groups are intended for discussions and general chit
chat about radio. Rec.radio.info will contain informational, factual articles
only. Follow-ups are redirected to an appropriate other group, and further
discussion (if any) will not take place in rec.radio.info.

In order to ensure that rec.radio.info contains only appropriate articles, it
was decided to create the group as a moderated newsgroup.

-- Why are messages almost always cross posted to rec.radio.info?

It provides a "tag" for each article to be assembled into a filtered
presentation in rec.radio.info (even with cross-posting, only one message, with
```

a unique Message-ID, is propogated across the net). This tag also facilitates a pre-existing method of dropping or cancelling the articles locally within the discussion groups if you don't want to see them. This accommodates individuals who want to separate the bulletins from the discussions, discussions from the bulletins, as well as those who are adamant about not reading another newsgroup and wanted to see everything all in one basket.

With the total size of Usenet (in number of newsgroups and total traffic) doubling every year or so, this is no insignificant contribution to reducing information noise and chaos. Making the discussion groups a catch-all, and making extra newsgroups filters on that catch-all, is also the most realistic way to implement such a scheme (It's not intuitively obvious what the charter, contents, and general appropriate topics for each and every newsgroup are. Seeing FAQ's and charter/intro postings in the home newsgroup is beneficial for new readers).

By cross-posting one only is adding a few tens of bytes to each bulletin (to specify the extra group on the Newsgroups line), but are adding the capability for very powerful filtering features available on most news servers, listservers and readers. Your local news guru could probably explain these features in more detail.

In rn, for example, according to Leanne Phillips in her rn kill-file FAQ, add a line of the form:
/Newsgroups:.*[,]rec\.radio\.info/h:j
either in ~/News/KILL (if you don't want to see rec.radio.info articles anywhere) or ~/News/rec/radio/amateur/misc/KILL (if you don't want to see them just in rec.radio.amateur.misc). The latter method means your kill file will only be consulted during rec.radio.amateur.misc (and hence runs more efficiently), and will probably work for most people.

In nn, according to Bill Wohler in his nn FAQ, add a line of the form:
rec.radio.info:!s/:^
in ~/.nn/kill (if you don't want to see rec.radio.info articles anywhere), or put the following lines:
sequence
rec.radio.info
rec.radio.
at the end of ~/.nn/init in order to see all the rec.radio.info bulletins first, then read the remaining rec.radio.* without the bulletins.

-- What is a 'follow-up', and what does 'moderated' mean?

If you are new to Usenet and are not familiar with the terminology, you might want to read the general introductory articles found in the newsgroup news.announce.newusers. Doing so will make your life on the net much easier, and will probably save you from making silly beginner's mistakes.

If you think that at this moment you are reading an echo, a conference, or a bulletin board, I'd also strongly suggest a trip over to news.announce.newusers.

For the rest of this article, I will assume you have a basic knowledge of Usenet terminology and mechanics.

A moderated group means that any article that needs to be posted to the group has to be accepted by the moderator of the group. Since we need to ensure that followups to an article (discussion) do not show up in the rec.radio.info newsgroup, the `Followup-To:' header line contains a newsgroup that is appropriate for disussions about the specific article.

-- OK, so now I know what 'moderated' means. Tell me more.

Rec.radio.info is a moderated newsgroup, which means that all articles submitted to the group will have to be approved by the moderator first.

The current moderator of the group is Mark Salyzyn. Submissions to rec.radio.info can be posted, or e-mailed to:

rec-radio-info@ve6mgs.ampr.ab.ca

Comments, criticisms, suggestions or questions about the group can be e-mailed to:
rec-radio-request@ve6mgs.ampr.ab.ca

But before you do so, please be sure to check out the "Submission Guidelines" article.

The influence of the moderator should be minimal and of an administrative nature, consisting chiefly of weeding out obviously inappropriate articles, while making sure correct headers etc. are used for the appropriate ones.

-- What type of material is considered inappropriate?

There are three broad categories of articles which will be rejected by the moderator:

1) Requests for information: rec.radio.info is strictly a one-way street. I receive information in my mailbox; I then post it to rec.radio.info. Requests for specific information belong in the normal discussion newsgroups. If your request gets answered, you might consider passing the answer on to rec.radio.info, though. Especially if you can edit it into a informational, rather than a discussion, format.

2) Obvious discussion articles, or articles that appear unsubstantiated.

3) Commercial stuff: a relatively unbiased test of a radio product would be accepted, but any hint of for-profit might be reason for rejection. For three reasons: This is not the purpose of the list, for-profit is a controversial topic, and this list may be passed onto Amateur Packet Radio (where for-profit is prohibited except under certain provisos).

rec.radio.swap (or possibly comp.newprod) may be more deserving of the posting in any matter.

Similarly, copyrighted material generally cannot be used. If it's TRULY worthwhile to the net, I would recommend obtaining permission from the copyright holder. Please note the source, and if permission was given. I

reserve the right to make the final decision concerning appropriateness in all situations. In most cases, a brief summary of, or pointer to, the copyrighted information may be all I can allow.

-- I do not have access to news, how can I get the information posted to rec.radio.info?

brian@UCSD.EDU (Brian Kantor) has kindly supplied a mail list server for rec.radio.info. Non of the articles will be digested, due to their size, so you will receive individual mailings for every article posted to the group.

Mail sent to radio-info@ucsd.edu will be forwarded to the moderator and thus is an alias to rec-radio-info@ve6mgs.ampr.ab.ca

To subscribe and unsubscribe via the listserver; the format for that is

sub address radio-info
unsub address radio-info

where 'address' is your full mailing address. Send this request to

listserv@ucsd.edu

Note that the server will automatically delete any address that bounces mail. If you leave the address portion blank, it will try to deduce your address from the mail headers. This may not work if you are on bitnet, milnet or some other non-Unix host, so it is recommended to put your return address in any case. For example:

sub mymailbox@myhost.mydomain.mil radio-info
or
sub MEMEME01@DMBHST.bitnet radio-info

or something like that.

-- Will the material appearing in rec.radio.info be archived somewhere?

Yes. Still firming up details at the moment but here is a preliminary list:
- unbc.edu as maintained by Lyndon Nerenberg <lyndon@unbc.edu>
- nic.funet.fi maintained by Risto Kotalampi <rko@cs.tut.fi>
saved to /pub/dx/text/rec.radio.info currently stored as numbered files.

Effectively this means that anything you post to rec.radio.info will be permanently stored, so your work will not be lost.

-- I have a regular posting with timely information, is there a way to speed up it's delivery, or automate for more convenience?

Yes, there is! It may take a bit of chatter with the moderator, but we are willing to take responsible people and provide them the means of posting the articles directly from their site. We will try everything we can as we fully realize that DX (distant signal) and astronomical data can be somewhat transitory. We are also willing to allow regular posters of information the same courtesy, even if the information is not as time critical.

We refer to this as self-moderation, which is partly based on the model for news.answer. This requires co-operation and good will to be beneficial to the community in the rec.radio hierarchy.

I suggest reading the posting guidelines for more information. I am open to suggestions.

I thank the following individuals for their input into this article:
rec.music.info moderator Leo Breebaart rec-music-info@cp.tn.tudelft.nl
rec.radio.broadcasting moderator Bill Pfeiffer wdp@gagme.chi.il.us
Paul W. Schleck, KD3FU pschleck@unomaha.edu
Ian Kluft, KD6EUI ikluft@uts.amdahl.com

--
Mark Salyzyn -- Moderator rec.radio.info
Submissions to: rec-radio-info@ve6mgs.ampr.ab.ca
Administrivia to: rec-radio-request@ve6mgs.ampr.ab.ca
* Requests for information do *not* belong in rec.radio.info *

186. Re: Passed test, what do I do now?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-31 04:29:22 UTC
From: ben@nj8j.atl.ga.us
Message-ID: <NFc59B2w165w@nj8j.atl.ga.us>
Source record: 51688
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc

mvp@netcom.com (Mike Van Pelt) writes:

> What about baud rates? 1200 baud sounds horribly slow to me since I
> have v.32bis on my computer, but the few people I've talked to say 1200
> baud is The Standard for packet.

If you haven't already gotten in touch with other amateur in your area
(or with a club), you need to find a local ham who's really into packet.
Find out how packet is used in your area. 1200 bps is pretty standard,
but some areas are upgrading. In some areas 9600 is used for the
backbone, in others, you might find 9600 available as a user access
port. Find out what's being done in _your_ area, since that's what
you'll be communicating with.

> What's the modulation for digital?
> It wouldn't happen to be the same as for phone modems, would it?

For 1200bps, it's actually an old and virtually obsolete phone modem
standard, Bell 202.

> Could
> I use my regular modem for a TNC?

Not really. Not only does your modem probably not do Bell 202(it's
half-duplex, and Bell 212 modems(which are dirt cheap now) do full
duplex, so running Bell 202 on a phone line isn't worth it), packet is a
synchronous protocol, and your modem(not to mention the serial port
on your PC) generally expects asynchronous communications. And it's not
ordinary synchronous, it's bit-synchronous, with bit stuffing. Suffice
it to say that the typical personal modem isn't set up to deal with this.

If you're willing to do a bit of soldering(and are running a PC clone,
you can pick up a modem kit for about $50 that can be used(with the
appropriate software, which will handle the bit-stuffing, etc) for
packet. For your first packet setup, I think you're better off spending
the $100-$120 for a TNC2-clone type TNC(MFJ 1270B, Pac-com Tiny-2, etc).

> (Maybe I'll have my license by Christmas...)

Judging from recent postings about license receipt time, you should get
it by Dec 1st.

Ben

+---------------------------------------+---------------------------------+
| Ben Coleman NJ8J | "All that is not eternal is |
| AX.25: NJ8J@W4QO.#EAL.#ATL.GA.USA.NA | eternally irrelevant." |

```
| Internet: ben@nj8j.atl.ga.us | C. S. Lewis |
+-------------------------------------------------------------------------+
```

187. 10GHz Link PCBs?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-31 11:21:23 UTC
From: mda@cam-orl.co.uk
Message-ID: <1993Aug31.112123.4016@infodev.cam.ac.uk>
Source record: 51674

I am building the 10GHz / 2Mbps Link described in the 1993 ARRL handbook.
I am just at the point of making the PCBs, but thought I would check here
first to see if anyone knows of a source for these boards. The article
in the handbook gives no layout recommendations for the receiver board,
but does give a proposed layout for the preamp boards. If anyone has
built this system could they please provide hints and tips on what they
found to be a successful layout.

many thanks
--
Mike Addlesee
G1TFK

188. Packet Poltergeists ?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-31 12:13:27 UTC
From: BDS2@psuvm.psu.edu
Message-ID: <93243.081327BDS2@psuvm.psu.edu>
Source record: 51675
Cross-posted to: rec.radio.amateur.packet,rec.radio.amateur.digital.misc

Last night I got a call from a neighboring ham to tell me my packet station was broadcasting bunches of ascii characters for several minutes on its own, with out having been connected to anyting. When he tried to connect, the station only sent out "]"'s to him. I am stumped as to the cause. The only thing I can think is that when it receives some packets that have non-text characters (like when local nodes are processing compressed mail), the terminal emulator on the PC starts to beep and clear the screen. Has anyone ever heard of that sort of garbage characters actually able to *initiate* a "packet storm" like what my station started? Needless to say, I don't leave it on unattended any more!

BTW, my setup:

MFJ1270 TNC
Tandy laptop PC running PC Plus terminal program
Azden PC3000-2m transceiver
2m 1/4 wave dipole in the attic.

Thanks for any help!

Brett N3EVB

189. Re: 10GHz Link PCBs?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-31 14:09:29 UTC
From: glenne@sad.hp.com
Message-ID: <CCMnBu.L5u@srgenprp.sr.hp.com>
Source record: 51676

Mike Addlesee (mda@cam-orl.co.uk) wrote:
: I am building the 10GHz / 2Mbps Link described in the 1993 ARRL handbook.
: I am just at the point of making the PCBs, but thought I would check here
: first to see if anyone knows of a source for these boards. The article
: in the handbook gives no layout recommendations for the receiver board,
: but does give a proposed layout for the preamp boards. If anyone has
: built this system could they please provide hints and tips on what they
: found to be a successful layout.

Artwork, board supply and other information is available by anonymous
ftp from col.hp.com under packet/n6gn. There is a README file as well.

73
Glenn n6gn

190. Re: MFJ 1270, 1274, 1278

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-31 15:37:35 UTC
From: RICK_A._MARTIN.OKLAHOMA_CITY@xerox.COM
Message-ID: <"31-Aug-93.10:37:35.CDT".*.RICK_A._MARTIN.OKLAHOMA_CITY@Xerox.com>
Source record: 51677

```
!Bob Nielsen (w6swe@w6swe.tapr.ORG) wrote:
!
!: In Ham-Digital Digest #22, Al, N1AL writes:
!
!: >The 1274 is a multi-mode modem. The hardware is very simple -- a
! rather
!: >crude PLL type modulator/demodulator with raw serial input/output to
!two
!: >of the miscellaneous control lines of the serial interface to the host
!: >computer. ALL the decoding is done by a software program (supplied) in
!: >the host PC. This means you MUST use a standard IBM clone.
!
!: You must have this confused with something else. The 1274 is
!: identical to the 1270B, except that a tuning indicator for HF
!: (similar to the TAPR tuning indicator) has been added.
!
!Yes, I guess I got my model numbers confused. The one I was talking about
!Is, I think, the MFJ-1278.

Still not completely accurate. I run my 1278 with a ADM-3a dumb terminal in
packet, amtor, RTTY, and CW. You are correct about the fax and SSTV modes.
They are decoded by the software in the PC.

Regards,
Rick
AB5ON
Rick_A._Martin.Oklahoma_City@Xerox.COM
```

191. SpecComm Magazine?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-31 19:53:18 UTC
From: sscalsk@screamer.nswc.navy.mil
Message-ID: <SSCALSK.93Aug31145318@screamer.nswc.navy.mil>
Source record: 51678

A few years ago I remember adds in PopComm and Monitoring Times for a publication called SpecComm, they covered digital communications. Lately I have not been able to locate an address. Are they still in business? If so, can someone forward subscription info. Thanks.

-= stan

192. Amiga NOS,TCP/IP,BBS software

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-31 19:57:36 UTC
From: lanzo@tekelec.com
Message-ID: <1993Aug31.195736.2988@gecko.uucp>
Source record: 51682

[No readable article body recovered]

193. Southend and District Radio Sociey Clubnews

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-08-31 20:34:49 UTC
From: g1xgp@g1xgp.demon.co.uk
Message-ID: <746856342snx@g1xgp.demon.co.uk>
Source record: 51690

```
SOUTHEND & DISTRICT RADIO SOCIETY CLUBNEWS.

Forthcoming Events:-

03/09/93 No Meeting - Rocheway Centre Closed.
05/09/93 Vange Rally.
10/09/93 Talk on Herbs (Should be a good one hi).
17/09/93 Quiz Night.
19/09/93 EPG/KEPAC Junk/Boot Sale at Rocheway (10:00am - 15:00).
01/10/93 Talk by Bob of Waters & Stanton.
10/12/93 Talk on Essex Villages.

Special Event Stations that the Club will be participating in:-

CLUB MAILING ADDRESS:-

P.O. Box 88, Rayleigh, Essex SS6 8NZ.

(Letters only please - No parcels).

Steve..G1XGP @ GB7DUG
"SOUTHEND & DISTRICT RADIO SOCIETY"

## End of File ##
/ex

--------------------------------------------------------------------
+ Steve Blinkhorn + G1XGP @ GB7DUG.#32.GBR.EU (Amateur Radio) +
+ AMPRnet + g1xgp@g1xgp.ampr.org [44.131.16.147] +
+ Essex Packet Group + g1xgp@g1xgp.demon.co.uk (Internet) +
--------------------------------------------------------------------
```

194. Re: Packet Poltergeists ?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-01 02:37:10 UTC
From: "Seth M. Dworken" <p00123@psilink.com>
Message-ID: <2955925992.0.p00123@psilink.com>
Source record: 51681
Cross-posted to: rec.radio.amateur.packet,rec.radio.amateur.digital.misc

>DATE: 31 Aug 93 12:13:27 GMT
>FROM: BDS2@psuvm.psu.edu
>
>Last night I got a call from a neighboring ham to tell me my packet station
>was broadcasting bunches of ascii characters for several minutes on its own,
>with out having been connected to anyting. When he tried to connect, the
>station only sent out "]"'s to him. I am stumped as to the cause. The only
>thing I can think is that when it receives some packets that have non-text
>characters (like when local nodes are processing compressed mail), the
>terminal emulator on the PC starts to beep and clear the screen. Has anyone
>ever heard of that sort of garbage characters actually able to *initiate* a
>"packet storm" like what my station started? Needless to say, I don't leave it
>on unattended any more!
>
>BTW, my setup:
>
>MFJ1270 TNC
>Tandy laptop PC running PC Plus terminal program
>Azden PC3000-2m transceiver
>2m 1/4 wave dipole in the attic.
>
>Thanks for any help!
>
>Brett N3EVB

Well, I have a thought, as far as a general answer goes...

My guess is that something triggered the terminal emulator to transmit
some sort of data. The TNC would then send this in UI frames.

By the way, if you set up the TNC to not monitor any traffic while not
connected, you should be able to avoid this.

-Seth

195. CAPRA:Need German Transl

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-01 04:30:55 UTC
From: JCHESNER@holonet.NET
Message-ID: <9309010430.AA26769@holonet.net>
Source record: 51679

CAPRA, the Chicago Area Packet Radio Association, has received information about 23cm microwave digital transceivers and other equipment from a group of German amateurs.

We now have about 80 pages of documentation, theory, schematics, and other information which details the equipment which has been developed by this group of hams.

Unfortunately, all of the information is in German. We haven't found any volunteers - at least not yet, in our area, who would be willing to provide a translation for the material.

If you would considering offering your services, we would be most grateful.

To discuss the matter, please call me at (708) 253-0046 in NW suburban Chicago. In not here, I'll return your call at whatever time is convenient for you.

One note - the materials are obviously of a technical nature; we suspect that a knowledge of basic German, while helpful, will be inadequate. However, if you are you are quite fluent in the language or have a strong technical background, this may be sufficient.

73 de Jim Chesner, Vice President - CAPRA

N9GBH@N9HSI.IL.USA.NOAM jchesner@holonet.net
70040.125@compuserve.com n9gbh%n9gbh.ampr.org@ke9yq.ampr.org

196. Frequency Forum

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-01 04:43:00 UTC
From: Jack.Anderson@f239.n109.z1.fidonet.org
Message-ID: <746867642.AA01000@blkcat.UUCP>
Source record: 51680

```
The Frequency Forum Bulletin Board System in Vienna, VA now carries
this UseNet newsgroup.

Jack Anderson, Sysop

Internet: janderson@ram.net
(alternate) jack.anderson@f239.n109.z1.fidonet.org

-*-SCANNER BBS for VA, MD, DC!-*-
-*-The Frequency Forum-*-(703) 207-9622-*-9600/V.32/MNP-*-
-*-Files, Frequencies and Discussion for Scanner Hobbyists/Radio Amateurs-*
***
* SLMR 2.1a *
```

197. Re: Comments please on MFJ 1270B and 1274 TNC's

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-01 05:09:36 UTC
From: cfm1471@ucs.usl.edu
Message-ID: <1993Sep1.050936.18708@usl.edu>
Source record: 51683
Cross-posted to: rec.radio.amateur.packet,rec.radio.amateur.digital.misc

In article <1993Aug26.195801.27486@newshost.lanl.gov> tjf@beta.lanl.gov (Tom J Farish) writes:
>I am about to take the plunge into packet. I've got the radio, the antenna,
>a Mac (also an Amiga). Now I need a TNC. The MFJ units seem to have some
>nice features, and the price is low. How do they work? Compared to BayPac,
>PMP, etc. Is there something I can adapt to my Amiga? How is Savant for
>the Mac? So many questions, so little time...
>
>Thanks for any info!
>
>Tom
>KJ5LT
>
>PS. I am most interested in VHF, but HF looks interesting as well.
>
Tom, the MFJ works great for the price. It will allow you to do tcp/ip because of its KISS mode, and its modem disconnect header is an easy way to hook up an external modem for higher speed packet when the time occurs. The good thing about buying a "true" tnc is that it will work with any comm program, whereas the PMP and BayPac need some sort or proprietary software to run with em. Yeah they have tcp/ip and all those emulators, but just use nos for the mac or nos for the amiga or nos for the coco or for the pc, whatever you have the tnc will do it! Like i said, its a fair price for either, the 1274 has the tuning for HF and the 1270 doesnt, so if you want HF get the 1274, if not just get the 1270! Good luck with your purchase!

Charlie

Charles Morrison KI5XP Internet: ki5xp@ucs.usl.edu
U. of Southwestern La. Internet: cfm1471@ucs.usl.edu
Lafayette, La. 70506 Packet: KI5XP@K5ARH.LA
(318) 988-3821

****** Field Day (2A): W5DDL #2 in 92, #1 in '93 ******

198. Re: Comments please on MFJ 1270B and 1274 TNC's

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-01 05:15:16 UTC
From: cfm1471@ucs.usl.edu
Message-ID: <1993Sep1.051516.18877@usl.edu>
Source record: 51684
Cross-posted to: rec.radio.amateur.packet,rec.radio.amateur.digital.misc

>The 1274 is a multi-mode modem. The hardware is very simple -- a rather
>crude PLL type modulator/demodulator with raw serial input/output to
>two of the miscellaneous control lines of the serial interface to the
>host computer. ALL the decoding is done by a software program (supplied)
>in the host PC. This means you MUST use a standard IBM clone.
>
>Note that the 1274 does not use the TXD and RXD bits to send and recieve
>the serial data, but uses some handshake lines (I forget which ones)
>with the PC doing some kind of parallel poll to do the decoding.
>This means if your PC's serial interface is in any way non-standard,
>it might not work. Mine didn't. I later found out that one of the
>wires on the connector was mis-wired. However, it worked fine with
>my Hayes-compatible modem and my Kantronics TNC.
>
>The 1274 has no pre-filtering of the received signal. To get decent
>performance on RTTY, CW, FAX, etc. I would recommend some kind of
>external filter ahead of the unit. Either selectible IF filters in
>your HF transceiver or perhaps a variable-bandwidth audio filter
>like the W9GR DSP unit.
>
Alan, i think you have the 1274 mixed up with another tnc from MFJ.
Isnt the 1274 the same as the 1270 except it gives you the HF tuning
indicator?

Charlie

Charles Morrison KI5XP Internet: ki5xp@ucs.usl.edu
U. of Southwestern La. Internet: cfm1471@ucs.usl.edu
Lafayette, La. 70506 Packet: KI5XP@K5ARH.LA
(318) 988-3821

****** Field Day (2A): W5DDL #2 in 92, #1 in '93 ******

199. Amiga NOS,TCP/IP,BBS software [Again]

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-01 17:27:53 UTC
From: lanzo@tekelec.com
Message-ID: <1993Sep01.172753.7889@gecko.uucp>
Source record: 51691
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.packet

[Grrr ... how nice of our news software to dispose of the body
of my last message ... so I try again.]

Does anyone know if there is any software available for the
Amiga (under AmigaDOS not Unix) which will allow me to set
up a full featured BBS and e-mail system with TCP/IP support?

Currently I am running AmigaNOS, which is good as an e-mail
system, but which totally lacks support for news & BBS style
functionality. [It's also buggy and doesn't really deal with
the Amiga OS very well, but that's another issue.]

What I am looking for would ideally:

* Provide full support for TCP/IP and NET/ROM,
including things like SMTP and FTP and TELNET functions
(as AmigaNOS now provides)

* Support a mail system. Messages, forwarding, replies,
etc. AmigaNOS provides some of this, although it could be
improved upon.

* Support a news system, with different message areas et al
such as we are used to on Usenet netnews.

* Have a decent interface to the news system, with the usual
facilities we usually expect in our favorite news readers,
such as subject search mode, filtering out unwanted things
(kill files), followups, e-mail replies, etc.

Any suggestions?

I've crossposted this to rec.radio.amateur.digital.misc and
rec.radio.amateur.packet. Followups should probably be directed
to rec.radio.amateur.digital.misc only. Or email to the
address given below. I will summarize my findings if there is
sufficient interest.

Thanks & 73,
--Mark

+---+------- /// -----+
| Mark Lanzo KD4QLZ lanzo@tekelec.com 919-460-5576 | \\\/// |
+---+---- \XX/ -------+

200. Looking for info on TASCO software

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-01 18:49:10 UTC
From: dlevy@libra.math.tau.ac.il
Message-ID: <1993Sep1.184910.17665@aristo.tau.ac.il>
Source record: 51685

Hi,
Does anyone out there know what capabilities does the TASCO message
board software (supplied with their TNC-231) has ? (i.e. does it
support TCP/IP , NET/ROM , zip files etc.).
Any info wil be much appreciated.

doron levy
dlevy@libra.math.tau.ac.il
dlevy@lune.math.tau.ac.il

201. Mac 660AV DSP and packet radio

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-01 19:11:30 UTC
From: jrl2@crux1.cit.cornell.edu
Message-ID: <jrl2.746910690@crux1.cit.cornell.edu>
Source record: 51686

Just wondering,
The mac 660av has a dsp chip that is being used to
do speech recognition, modem emulation, faxemulation.
Anyone working on a packet modem aemulator?
Thanks,
-Jeff Luszcz N2TIQ
jrl2@cornell.edu

202. Re: Packet Poltergeists ?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-01 20:17:10 UTC
From: adler@netcom.com
Message-ID: <adlerCCoz0o.C0u@netcom.com>
Source record: 51687
Cross-posted to: rec.radio.amateur.packet,rec.radio.amateur.digital.misc

In article <93243.081327BDS2@psuvm.psu.edu> <BDS2@psuvm.psu.edu> writes:
>Last night I got a call from a neighboring ham to tell me my packet station was
>broadcasting bunches of ascii characters for several minutes on its own, with
>out having been connected to anyting. When he tried to connect, the station
>only sent out "]"'s to him. I am stumped as to the cause. The only thing I can
>think is that when it receives some packets that have non-text characters
>(like when local nodes are processing compressed mail), the terminal emulator
>on the PC starts to beep and clear the screen. Has anyone ever heard of that
>sort of garbage characters actually able to *initiate* a "packet storm" like
>what my station started? Needless to say, I don't leave it on unattended any
>more!
>
>BTW, my setup:
>
>MFJ1270 TNC
>Tandy laptop PC running PC Plus terminal program
>Azden PC3000-2m transceiver
>2m 1/4 wave dipole in the attic.
>
>Thanks for any help!
>
>Brett N3EVB

I'm not familiar with PC Plus; you should check to see what
kind of terminal it emulates and how accurate it does so.
Is it some sort of ANSI 3.64 type of emulation? That might
be a problem if your TNC actually sends thru compressed binary
data that contains certain magic character sequences. For example,
what does your terminal emulator do when it receives an ENQ
character (0x05)? Does it send an Answerback sequence? Also,
what about ESC Z, or ESC [c, or ESC [0, or ESC [> c, etc.
There are a whole bunch of sequences that could cause an
ANSI 3.64 compatible, or VT100, or other type of terminal
to autonomously transmit or to lockup in a funny mode. But off
the top of my head, I can't think of one that would just cause "]"'s.

203. Need a Packet Computer?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-01 20:33:36 UTC
From: donh@hpcuhe.cup.hp.com
Message-ID: <171520001@hpcuhe.cup.hp.com>
Source record: 51689

Anyone need a computer for Packet? I have two Heath H-89, and one H-8 computersthat I need to get out of my house, wife says OUT! These computers run a system from a floppy disk. They are NOT compatible with anything else in the world. If you have some programing experience, or want to get some, this systemis for you. I have a DOS system and also CPM. I have Basic, Cobol, and Assembly language assemblers. The H-89's are Z80 based, the H-8 is 8080. These systems are ideal for a Packet/logging system for someone who wants to play with software. I have pounds of documentation that will go with the systems, along with all kinds of software and utilities. The H-89's are terminals with the CPU built-in. The H-8 is a standalone CPU with expandable card cage. These systems provided a real learning experience for me, they are not for everyone, they are not turn-key, but I will let these go CHEAP. If you got the time, I got the Packet Computer for you. First person gets a shot at the best software choices.

```
**************************************************************************
* The opinions expressed are mine, and mine alone *
* *
* WB6LPJ - Cessna 172A N7770T - You can lead a horse to water, but a *
* pencil must be lead. *
**************************************************************************
```

204. The smallest TNC?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-01 21:09:55 UTC
From: uri@watson.ibm.com
Message-ID: <CCp1GJ.G1o@yktnews.watson.ibm.com>
Source record: 51540

```
Hi,
What's the smallest multimode TNC? And what's
the smallest packet TNC?

Thanks! [You can e-mail replies.]
--
Regards,
Uri. uri@watson.ibm.com scifi!angmar!uri
------------
<Disclaimer>
```

205. Comparison of PacTOR controllers

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-02 13:43:38 UTC
From: ericr@access.digex.net
Message-ID: <ericr.746977266@access>
Source record: 51692

Has anyone done a comparison of the different Pactor controllers?

Specifically, I am curious to know how the Paccomm controller compares
with the AEA PK-900 and PK-232MBX and the BMKMULTY software approach.

Email your comments and I'll post a summary here.

Thanks --
Eric

--
Eric Rosenberg WD3Q, EI4VPS, YJ0AER, J20BY, etc.
Volunteers In Technical Assistance voice: +703-276-1800
1600 Wilson Blvd., Suite 500 fax: +703-243-1865
Arlington, VA 22209 USA ericr@access.digex.com

206. FAXing over packet radio

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-02 13:47:50 UTC
From: ericr@access.digex.net
Message-ID: <ericr.746977447@access>
Source record: 51693

I remember reading or hearing bout some work going on in the Tokyo area
where a network was being established to send faxes over the radio.

Does anyone know any more about this. I'd be interested in knowing how to
input to radio from a fax machine and then output toone on the other end.

Thanks -- Eric

--
Eric Rosenberg WD3Q, EI4VPS, YJ0AER, J20BY, etc.
Volunteers In Technical Assistance voice: +703-276-1800
1600 Wilson Blvd., Suite 500 fax: +703-243-1865
Arlington, VA 22209 USA ericr@access.digex.com

207. RTTY software

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-02 20:11:57 UTC
From: jholly@cup.hp.com
Message-ID: <CCqtFy.H20@cup.hp.com>
Source record: 51694

I have the v2.04 of the WF1B RTTY program. I understand there is a newer version v2.09. Does anyone have a current address or phone number? Or anyone willing to help me get a current version?

Thanks, Jim, WA6SDM
jholly@cup.hp.com

208. frg8800

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-02 21:48:21 UTC
From: su92-ban@dront.nada.kth.se
Message-ID: <1993Sep2.214821.22104@kth.se>
Source record: 51695

Is there any free program for IBM-pc for controlling the YAESU
frg8800 via its FIF-RS232C interface.
If anybody knows about such creature PLEASE mail me a note
where it could be find.

Bengt
su92-ban@nada.kth.se

209. AMIGA AND BAYCOM QUESTIONSWO

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-03 15:38:26 UTC
From: pbj@info.fundp.ac.be
Message-ID: <19930904.030557.681990.NETNEWS@CC1.KULEUVEN.AC.BE>
Source record: 51700

Hello

Is it possible to use a Baycom compatible modem with the Amiga Computer ?
Is it possible to use a BBS sytems developped for the Baycom modem on an
Amiga ?
Is it possible to run NOS like program and a Baycom modem on Amiga ?
where can I get the drivers to drive a Baycom modem on an Amiga ?

Thanks a lot.

Pascal.

210. re: Looking for info on TASCO software

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-03 16:19:45 UTC
From: w6swe@w6swe.tapr.ORG
Message-ID: <188@w6swe.tapr.org>
Source record: 51702

Doron Levy <dlevy@libra.math.tau.ac.il> writes:

>Does anyone out there know what capabilities does the TASCO message
>board software (supplied with their TNC-231) has? (i.e. does it
>support TCP/IP, NET/ROM, zip files etc.).

The TASCO TNC-231 has a modified version of the TAPR firmware
(probably based on 1.1.5 or 1.1.6). The brochure I have (written
in Japanese, which I do not read) does not indicate, but I would
expect that it supports KISS, which would, in turn, support
tcp/ip operation. I would also expect that the hardware would
probably not be compatible with NET/ROM firmware, as the addition
of the other modes (RTTY, Baudot, FAX) would make the firmware not
directly interchangeable. Sending zip files, etc., is more a
function of the software you use with it. YAPP, and paKet should
be compatible. They work fine with the packet-only TASCO models.

Bob Nielsen, W6SWE Internet: w6swe@tapr.org
Tucson, AZ AX.25: w6swe@kc7cg.az.usa.na
Amateur IP: 44.124.12.16

211. BAYCOM MODEM AND AMIGA QUESTIONS.

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-03 17:05:57 UTC
From: pbj@info.fundp.ac.BE
Message-ID: <9309031705.AA28573@arzach.info.fundp.ac.be>
Source record: 51696

Hello,

Is it possible to use a Baycom compatible modem with an Amiga Computer ?
Which programs are needed and where can I find them to drive a Baycom with
an Amiga ?
Is it possible to run NOS for Amiga with a Baycom modem ?
Where can I find a F6FBB like program on the Amiga ?

Thanks a lot and best regards.

Pascal.

212. Any interest in a DSP conference?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-03 19:45:02 UTC
From: jbloom@arrl.org
Message-ID: <2175@arrl.org>
Source record: 51698
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

Some of us here at ARRL HQ have been discussing the idea of
putting together a conference, probably for next year, on digital
signal processing in Amateur Radio. This would be along the
lines of the ARRL Digital Conference (nee Computer Networking
Conference), but focussing on applications of DSP to ham radio.
I've little doubt that we could get people to attend a
conference like that, but I'm not sure whether we could get
people to submit papers for it. There's not much point in having
a conference unless you have presentations! Since many of the
possible DSP applications apply to digital communications, there
may be some cross-over between the existing Digital Communications
Conference and the proposed DSP conference, too.
So, I'm sounding the waters... are there folks out there who
would be interested in submitting papers for such a conference?
And are there any Amateur Radio organizations (clubs, etc) that
would be interesting in hosting same? Or is this a dumb idea?
Please let me know if you are interested.

Jon Bloom, KE3Z | jbloom@arrl.org
American Radio Relay League |
225 Main St., Newington CT 06111 |

213. Contents of the ARRL 12th Digital Conference Proceedings

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-03 20:04:31 UTC
From: jbloom@arrl.org
Message-ID: <2176@arrl.org>
Source record: 51697
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc

(Note: the Digital Communications Conference, formerly called the
Computer Networking Conference, will be held on Sept. 11 in Tampa, FL.)

List of papers, 12th ARRL Digital Communications Conference

"Using Airborne Digital Repeaters in Emergency Communications,"
by Gary Arnold, WB2WPA
"A Prototype TNC-3 Design Approach, " by Bill Beech, NJ7P, Doug
Nielsen, N7LEM, and Jack Taylor, N7OO
"DSP Implementation of 300- and 1200-Baud FSK Packet
Demodulators," by Jon Bloom, KE3Z
"The ARDS Project," by Roy V. Ekbert, W0LIQ, and Martin R.
Schroedel, K9LTL
"Usage of TCP/IP Over ROSE in the Tampa Bay Area," by Chuck Hast,
KP4DJT/TI3DJT
"Unique Identification Signals for CCIR 625," by Michael J.
Huslig
"Network Information Services," by Brian A. Lantz, KO4KS
"Networking ANSI Color Graphics," by Brian A. Lantz, KO4KS
"Interfacing Between ROSE and TCP/IP," by Thomas A. Moulton, W2VY
"Packet Radio in Disaster Situations," by Robert Osband, N4SCY
"The HUB 5/29 IP Routing Experiment," by Paul Overton, G0MHD, and
Ian Wade, G3NRW
"A Low Cost Transceiver for 19.2 kb/s FSK Transmission in the 23
cm Band," by Wolf-Henning Rech, N1EOW/DF9IC
"Low Cost Entry Into Packet Radio Using BayCom," by Christopher
C. Rendenna, KB2BBW
"Improved TNC Interconnections," by Donald A. Rotolo, N2IRZ
"Packet Tracker--A Graphical Packet Tracking Program," by Mark
Sproul, KB2ICI
"Mail Tracker--A Graphical Mail Tracking Program," Keith Sproul,
WU2Z
"The Client/Server Bulletin Board System (csbbs)," by Jim Van
Peursem, KE0PH, and Bob Arasmith, N0ARY
"RMAILER: The Next Generation," by Frank Warren, Jr., KB4CYC
"SoftWire," by Aaron Wohl, N3LIW

Jon Bloom, KE3Z | jbloom@arrl.org
American Radio Relay League |
225 Main St., Newington CT 06111 |

214. SCDX 2186

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-04 03:08:24 UTC
From: Terry Stader - KA8SCP <p00489@psilink.com>
Message-ID: <$scdx.2186@ampr.org>
Source record: 51714
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.info

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::::::::::::::::::::::::::::::::::::
:: MediaScan ::
:: SWEDEN CALLING DXERS ::
:: from Radio Sweden ::
:: Number 2186--Sept. 6, 1993 ::
::::::::::::::::::::::::::::::::::::
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Satellite, shortwave and other electronic media news from Radio Sweden.

This week's bulletin was written by George Wood.

Packet Radio BID SCDX2186

All times UTC unless otherwise noted.

NORDIC MEDIA NEWS:

SWEDEN--The major media debate in Sweden right now is the dubbing into Swedish of the American animated cartoon, "The Simpsons" by the private broadcaster TV3. Traditionally, Scandinavian television broadcasters subtitle foreign programs. The only exception are cartoons for children. TV3 claims that carrying "The Simpsons" in English has excluded many young viewers.

This decision has been widely criticised. In a lengthy article recently, Sweden's most respected newspaper, "Dagen Nyheter" maintained that "The Simpsons" is a program for adults, as it satirizes many aspects of American life. The newspaper compares what it calls the "lobotomizing" of the program to dubbing Sir Laurence Olivier with a "half-decent ventriloquist".

TELEVISION IN SWEDEN--Sweden is the size and shape of California, yet has only three national television networks, and no other terrestrial television broadcasters. But there is room for many more stations. In comparison, to take the example of a small American city, in San Francisco alone there are 11 separate television stations.

The Swedish government has now commissioned a study into expanding the number of over-the-air channels. According to Lars Maren of the Swedish Ministry of Culture, modern technology permits a major expansion. Following the study, the government will decide whether to authorize new national or local transmitters. (TT)

TV4--Until two years ago, the only television signals on the air in Sweden were the two national public service channels. They have been joined by the private commercial broadcaster TV4, which also uses the Tele-X satellite. TV4 plans to expand its schedule to 24 hours a day. Initially, the station

intends to broadcast continuously from morning to evening by next year. The all-night gap would be filled by 1996. The only problem with night broadcasting is that for two weeks every Fall and Spring, Tele-X is in the Earth's shadow, and cannot be used during the middle of the night. This affects the 2 percent of the station's audience who cannot receive TV4 from terrestrial transmitters.

To counter this, TV4 is considering using another satellite. ("Dagens Nyheter")

TELE-X--Things are not going well for Tele-X in other ways. FilmNet has sold its 85 percent share of the satellite back to the Swedish government, and the Swedish Space Corporation. The private pay film channel bought its share last September, as part of the Conservative-led government's privatization campaign. The intention was that another satellite would be bought and co-located with Tele-X at 5 degrees East, in order to establish a Nordic satellite position in orbit. (TT)

But Norwegian Telecom outbid the Swedes and bought the only available direct broadcast satellite, Marco Polo II, which was then renamed Thor, and moved to 0.8 degrees West, alongside Intelsat 512, which also carries programming to Norway.

On August 30th the FilmNet Movies channel left Tele-X for Thor. According to "What Satellite TV" magazine, FilmNet decided to sell its share of Tele-X when the Swedish Space Corporation refused to move the satellite to the same position as Thor and Intelsat 512. ("What Satellite TV" and TT)

Unfortunately the Thor porject thus far borders on disaster, as the Norwegians insist on using the obscure D-MAC and Eurocrypt S systems, making what is supposed to be a Nordic satellite only available to Norwegians, and depriving satellite viewers in the rest of Scandinavia of CNN, Eurosport, FilmNet Movies and soon the Children's Channel.

The only advantage for Nordic viewers is that when FilmNet Movies left Tele-X the satellite could be restored to full strength for its broadcasts of TV4 and TV5 Nordic. (Bertil Sundberg in "Paa TV")

NORWAY--The Norwegian government is scrapping a demand it made to broadcasters requiring them to scramble television alcohol advertisements carried on cable and satellite television. The climb down was made by Norway as part of its negotiations to join the European Community. Previously CNN International had run in with Norway's rules after it was asked to erase commercials for alcohol. ("SatNews")

EUROPEAN MEDIA NEWS:

ASTRA--More broadcasters are appearing on the Astra 1C satellite. On (or just before) August 27th, in connection with the opening of the big electronics fair in Berlin, Germany's MDR3, ZDF, SW3 and ARD all launched their services on Astra.

Mexico's Galavision has started test transmissions on Astra transponder 44.

UK Living launched on transponder 34 on September 1st. Despite reports of problems or delays, on September 1st Country Music Television also began its service, on Astra transponder 41, sharing the channel with Discovery.

The shopping channel QVC is also apparently no longer under threat, and has signed a lease for transponder 38, where it's due to begin broadcasts on October 1st.

Meanwhile, the influence of the new satellite is making itself felt. According to "Skyguide", in its first three days on Astra, The Discovery Channel blasted into the UK satellite ratings with an impressive 200,000 viewers for its Loch Ness update program.

Transponder 47 on Astra has been undergoing tests recently, thought to be in preparation for a new service. A number of broadcasters have been rumored for the channel, including HBO, Cinemax, and the Franco-Geman cultural channel ARTE.

Now it's reported that Sky is planning to lessen the impact of the increase in Sky Sports subscriptions by launching a second sports channel, understood to be free to Sports subscribers, and this would use transponder 47. If it goes ahead, an announcement is likely to be made very shortly, with the channel possibly starting later this month.
("Skyguide" and James Robinson)

RTL-5 has begun test broadcasts, using the out-of-band transponder 64, not 63 as previously thought. RTL-5 is currently relaying RTL-4, in the clear. RTL-5 is to launch with its own programming on October 2. (James Robinson) Instead, Filmnet is using transponder 63, and is now carrying some encryption tests.

TNT and The Cartoon Network will begin their test transmissions on transponder 37 on September 10th, one week before their launch. ("Skyguide")

The Adult Channel began broadcasts on Bravo's transponder 42 on September 1st. The channel will leave transponder 26 (home of Radio Sweden) on September 30. (James Robinson)

RADIO--The World Radio Network will begin its tests on Astra transponder 22, audio 7.74 MHz, beginning September 15th, with a full schedule beginning October 1st. (James Robinson) This will include the relays of "All Things Considered" and "Morning Edition" from National Public Radio in the United States, currently heard on WRN's transponder on Eutelsat II-F1, as well as a number of hithertoo undisclosed international broadcasters in English.

OLYMPUS--Europe has one less communications satellite. The European Space Agency announced August 26th that it has terminated the four-year-old mission of its troubled Olympus satellite, 11 months ahead of schedule. The ESA says it sent the satellite to a lower, non-operational orbit where it would not collide or interfere with other satellites. Olympus had started spinning and did not have enough fuel to return to its proper geostationary orbit. Olympus had carried broadcasts from Italy and relays of news from the Canadian Broadcasting Corporation, and was also used to test advanced communications technologies, including high-definition television. Two years ago the satellite's position had to be corrected after it went into an uncontrolled

drift around the world. (Reuters)

EUTELSAT--The Turkish shopping channel KanalMarket can now be found on Eutelsat II-F4 on 11.575 GHz. (James Robinson)

Eutelsat has decided to relocate its Eutelsat I-F1 satellite from 21.5 degrees east to a more easterly location to provide telecomms services from Russia and CIS republics to Europe. Eutelsat I-F1 is in its last stages of life, but it will provide service until replaced by planned Eutelsat launches. ("SatNews")

Eutelsat I-F5 is to relay two hours of Albanian television every evening, beginning in October. The costs are being covered by the government of Serbian province of Kosovo, which has an ethnic Albanian majority. Programming will come from Albanian Radio Television and Kosovo's TV Pristina. (Radio Tirana via BBC Monitoring)

HUNGARY--Antenna Hungaria, the Hungarian telecommunications company, says that it plans to launch a 16-channel European satellite called "Domestic" in 1996, offering Eastern Europe's first commercial satellite service. ("SatNews")

POLAND--Reports say that Rupert Murdoch's News Corp. is likely to be a leading applicant in the race to run Poland's first national commercial television network. Apparently News Corp. is considering applying jointly with the Polish Investment Consortium to operate a service. Under Polish law News Corp would not be able to take more than a 33 percent stake in the broadcasting venture. Poland currently has two state-run television channels. ("SatNews")

FRANCE--France's leading television station, TF1, announced August 26th it will launch the country's first all-news channel next year. Etienne Mougeotte, managing director of the private television station, told Le Figaro newspaper that the channel will carry French-language news updates every 15 minutes. It will also have "talk shows like on CNN". The station will broadcast via cable and satellite, he said. Mougeotte said TF1 would be the channel's sole operator, although it would consider cooperating with French pay television network Canal Plus.

Prime Minister Edouard Balladur has announced the government will begin broadcasting educational programmes over the defunct Cinq network's airwaves next year. The programmes will run until 7 p.m., when the Franco-German biligual cultural station Arte, launched last year, starts its evening broadcasts. (Reuters)

THE CHINESE CHANNEL--The Chinese Channel has been granted an ITC licence to uplink programming from the UK. The channel is thought to be planning to launch a European service in time for the Chinese New Year next February. Backed by one of the world's largest producers of chinese programming, it could broadcast overnight on Astra 1C until a full transponder becomes available. ("Skyguide")

THE TRAVEL CHANNEL--Landmark Communications Inc, the US media conglomerate which owns the The Weather Channel and The Travel Channel, has confirmed that it is to launch The Travel Channel in Europe early 1994. The Landmark purchase of The Travel Channel US last year has been followed by a new look and programming review.

Kevin Senie, Executive Vice President and Chief Financial Officer of Landmark Communications says: "The UK is a key market for us, and now that The Travel Channel is working well in the States, we're in a position to move forward very quickly. We believe that this is a clear and powerful concept that UK viewers will react to very positively.

"We will launch in the UK early in 1994 and in the meantime are making substantial progress with our development plans which also include Benelux and Scandinavia."

Since the launch of The Weather Channel in 1982 it has enjoyed considerable success. It is now watched in 54 million homes in the US, and noted a surge in viewer ratings. The programming specification for the Travel Channel in the UK includes broad lifestyle entertainment across all the pleasures associated with travel - action, adventure, culinary experiences and cultural insights. ("SatNews")

DIGITAL BROADCASTING--NTL and Eutelsat have completed joint tests to prove the viability of wideband satellite transponders for carrying both conventional analog FM television signals and the new digitally compressed TV signals of the NTL System 2000.

A single Eutelsat transponder was shown to be able to carry simultaneously either a single FM channel and four digitally compressed channels or a total of eight digital channels at broadcast quality.

The compatibility, within one transponder, of a high power analog transmission and lower power digitally compressed signals means that operators can more easily migrate from analog to digital, with its attractive cost reductions. Eutelsat says that its wideband transponders are especially attractive since the premium for the additional bandwidth is much less than the extra cost of a whole transponder.

NTL's System 2000 is a complete multi-channel video compression system operating at broadcast quality using the MPEG standard. At 8 Mbits/second, four digital TV channels can be accommodated in the space normally occupied by one analog service. Lower bits rates are possible, giving even more channels at slightly reduced quality. ("SatNews")

SATELLITE TVRO:

GERMANY--Foreigners in Germany gained a rare advantage over their German neighbours recently when a court ruled they had a right to install satellite dishes to receive television broadcasts in their native languages. A state court in Karlsruhe said freedom of information took precedence over the rights of a landlord who wanted to block an Italian tenant from setting up a dish outside his flat. The court said landlords had to allow foreign tenants to set up a satellite dish if the apartment house does not have cable

television or the local cable company does not provide programming in the tenant's language. But they can refuse permission to German tenants if the building has cable television because they would already have access to many different German-language broadcasters. Cable television in Germany usually offer broadcasts from several neighbouring countries and Turkey but the mix depends on what regional cable companies think best meets local needs. (Reuters)

MALAYSIA--The situation is different in Malaysia. The Cabinet there has decided to continue to ban the use of satellite dishes to receive television programs. The Malaysian government wants to keep out what it views as possible negative cultural effects from foreign broadcasts. Relaxation of the ban also might allow foreign broadcasters to take away audiences from local programs, the "Sunday Star" and "New Sunday Times" newspapersquoted Information Minister Mohamed Rahmat as saying. Only the King and the Prime Minister are exempt from the ban, he said. Mohamed says three additional channels from the government-owned Radio Television Malaysia would be available next year for a monthly fee of about 50 Malaysian ringgit (USD 20). One channel would transmit CNN programs, one the BBC news service and the third would transmit sports programs. There are currently three television channels in Malaysia -- RTM One and RTM Two, owned by the government, and TV3, owned by the ruling party. All radio stations are government-owned. (AP)

ASIAN/PACIFIC MEDIA NEWS:

INDIA--As reported in edition 2184, on its Independence Day on August 15th India launched 5 new television channels on satellite. The event also marked the opening of the new Insat 2-B satellite. The five new channels - entertainment, music, "enrichment", business news and current affairs, and sports - are to compete with the Star-TV package from Hong Kong, which includes the Hindi language Zee TV channel. For the first time, airtime is being given to private producers.

A survey in January indicated that 3.3 million Indian homes were watching Star and Zee TV. Another survey revealed that satellite TV has reached 4 percent of India's half a million villages, where English-language soap operas are the most popular programming.

The Indian government has introduced legislation requiring cable operators to relay at least one of the new channels. But operators are complaining that signals from Insat 2-B are weaker than those from Star-TV on Asiasat-1. (PTI via BBC Monitoring and IPS)

JAPAN--Nihon Keizai Shimbum, Television Tokyo Channel 13 Limited and five sub-affiliates say that they will start broadcasting programs by satellite from 1997 using the BS-4 satellite. BS-4 is set to be launched in 1997. Once operational, the company says that it will plan to relay live broadcasts of economic news from Monday through Friday, and sports events and broadcast movies will be aired at the weekend.

The satellite operator TXN will simulcast HDTV broadcasts alongside conventional broadcasts, and the service will be split between pay-TV

services and advertising supported. A report in the Nikkei Daily Journal said that the monthly viewers fee would be around YEN500 per month. ("SatNews")

ASIA BUSINESS NEWS--Dow Jones has taken a 29.5 percent stake in Asia's first satellite business news channel Asia Business News. Transmissions are set to commence on October 15 initially for 18 hours daily on the Palapa B2P satellite. ABN is now owned jointly by Dow Jones, Television New Zealand Ltd and Telecommunications International, and SIM Ventures (two Singapore government bodies). ("SatNews")

AUSTRALIA--"SatNews" describes the Australian government's plan to sell-off pay television rights as a "farce". Ever since it first announced that four channels could be broadcast by satellite aboard an Optus satellite the whole affair has been dogged by errors, omissions and plain stupidity.

Industry analysts are amazed at the naivety of the Australian government and internationally it has became a laughing stock.

In the latest twist to the bitter tale, the two upstart winners of the licences have failed to come up with money pledged for the licences. Ucom Pty Limited and Hi Vision Limited paid significantly over the odds against over 50 rivals including seasoned veterans such as News Corp. (owner of British Sky Broadcasting) to secure the licences.

The Communications Ministry has now invited the second highest bidders to take over the licences. ("SatNews")

INDONESIA--Arianespace has signed a contract to launch the Indonesian communications satellite Palapa C1. The satellite, to by built by Hughes,will carry 30 C-band transponders and 4 Ku-band transponders. It is tobe launched in October 1995 to replace Palapa B2P, and will have an expected life of 14 years. (AFP via BBC Monitoring)

GLOBAL NETWORKS:

MURDOCH EXPANDS--News Corp., the massive international conglomerate owned by Rupert Murdoch, has jointed forces with Australia's largest telephone company Telestra to form an alliance to exploit the Asian media market. The new venture will pursue interests and investments in activities such as pay television, home shopping and interactive services.

It is not known whether News Corp. will merge its Asian media interests such as the recently acquired stake in Star-TV into the new venture, or whether it will continue to operate it at an arm's length.

Telestra and News Corp. have already taken a stake in Australian terrestrial broadcaster Seven Network Limited, and the Australian Broadcasting Authority is examining the deal for evidence of unfair competition. ("SatNews")

When News Corp, bought Star-TV there was wide speculation if Murdoch would put Sky News on Asiasat, competing with BBC World Service. Last week Murdoch announced he is turning Sky News into a global satellite television news network. Broadcasts to southern Africa are to begin on October 1. In a speech to Sky advertisers in London, Murdoch announced "Plans are well advanced to take Sky News, or a parallel service, to all continents of the world, where we will be seeking local partners, both national and regional." (Reuters)

The expanded Sky News would compete both with BBC World Service and CNNI International. News Corp. also owns the Fox Network in the United States. Presumeably a worldwide news service would also use the news departments of the Fox stations.

Ironically, a few weeks ago, when British Sky Broadcasting announced its Multi-Channel package, it appeared that Sky News would be coded and available only to viewers in Britain and Ireland.

At his London news conference, Rupert Murdoch also said News Corp.has signed a deal to develop a common internatinal digital satellite standard, which would allow TV programs to be beamed around the world on a single system: "We signed an agreement with some of the best brains in the business to develop, co-operatively, what will be the common digital satellite system throughout Europe, Asia, and the Americas." (Reuters)

NORTH AMERICAN MEDIA NEWS:

USA--There have been many changes in American satellite broadcasting during August. On August 1st the new Galaxy 4 satellite became operational. It only took a few minutes to move the traffic off of Galaxy 6 C-band and SBS-6 Ku band onto Galaxy 4 C and Ku band. After that move, SBS-6 moved over to 95 degrees west and it became operational on August 8. It appears that SBS-3 was retired and the COMSAT VIDEO ENTERPRISES services were moved onto SBS-6 from SBS-3. CONUS COMMUNICATIONS is also using SBS-6 -- they have transponders 12, 13, and 14 for their various feeds and Newstar SNG uplinks.

Galaxy 6, meanwhile, moved to 103 degrees west longitude and it started service on August 10 from that orbital slot. So far, the only video observed was the UNIVISION MIAMI occasional feeds channel on transponder 13.

Telstar 301 is getting more and more inclined with each passing day. Syndicators and other users of T1 are finding new homes so their television station affiliates can have the best picture possible. If syndicators had remained on T1, then they would get horrible pictures as the satellite works its way out of the beamwidth. The satellite could also get entirely out of the beamwidth of the television station dish and not be visible at all until the satellite drifted back into the beamwidth.

Some of the T1 services moving include:

Warner Brothers to Galaxy 4/21
Buena Vista Television Network to Telstar 302/6
Compact Video Satellite to Telstar 302/7

Paramount Television (home of "Star Trek") to Telstar 302/3
The VTC Satellite Network to Telstar 302/16.

ABC-TV has moved its east coast feeds and various newsfeeds (especially NewsOne feeds) to Telstar 302. The west coast feed is on Galaxy 3. All feeds were dual illuminating until August 1st,when LEITCH encryption was introduced. (Robert Smathers in "SatNews" and "Satellite TV Week")

DBS--DirecTV has signed up two new television channels for its planned US DBS satellite service. CNN International and Turner Classic Movies will join the other Turner Broadcasting Channels (CNN, Headline News, TNT, Cartoon Network and TBS Superstation) who previously signed up for the service. ("SatNews")

CHINA/USA--North American viewers can now watch hours of Chinese television programs from a new Sino-U.S. joint venture station. The America Asian Satellite Television Network is a joint venture of China Central Television Station, 20 local Chinese television stations, several major Chinese firms and the Chicago Chinese Communications Corp. (3C Group Enterprises), according to the official "China Daily". Twelve hours of programming each day will be uplinked from Chicago, including shows on Chinese culture, news, entertainment, sports, economy, as well as Chinese movies and soap operas. (AP)

New Century Television Chicago's "Daily News from China" service can now be seen for one hour immediately proceeding the North American Chinese Network program on Satcom K2 transponder 14. (Robert Smathers in "SatNews")

FOOD CHANNEL--TVFN, a new cable television food channel set for official launch on Thanksgiving Day in the US, is airing previews of its programming on cable networks. Initially a two-hour daily taster will be aired. Once launched, the service will be a round-the-clock basic cable service, featuring top food chefs, critics and industry previews. From September 27th TVFN will add a four-hour 'appetizer' to its viewing menu showing more programmes planned. Eight hours of daily programming will be cycled in a 24-hour
interval. (Sat News)

POLAND--TV Polonia, which broadcasts to Poles in Europe over Eutelsat, has signed an agreement to relay its programs to North America. The 10 million strong Polish community in the US and Canada will be watching Polish television programs from October 1st. TV Polonia hopes to sign agreements with 300 local cable networks to relay the programming. The next country which Polish television is to reach is Brazil. (TV Polonia via BBC Monitoring)

CABLE TV--The US Federal Communications Commission has brought forward the date of a scheduled fee reduction in cable television services from October 1st to September 1st. Estimates say that subscribers could save up to 10 percent off cable fees as a result of the FCC's new and controversial ruling. There are over 55 million cable TV subscribers in the US, and according to Gene Kimmelman of the Consumer Federation of America, a viewers' lobby group, over USD 100 million will be saved by viewers annually.

A decision was taken by the FCC on April 1st this year to reduce the fees charged to subscribers taking basic cable services. Premium channels will be unaffected by the move, and there is a fear that many cable networks will attempt to rejig and reclassify much of their programming. ("SatNews")

SATELLITE RADIO--Last night I determined for sure that the BBC WS Radio on C-SPAN C3-07 5.4MHz is different from the one on Anik E2-20 at 7.58 MHz. At 9:45-10:00PM Eastern every weekday night you can compare C3-07 and E2-20. You will find "Carribean Report" on C3-07 while on E2-20 you will find the regularly scheduled World Service program.

It looks like C-SPAN takes the feed intended for rebroadcast to the Carribean while the Canadians use another feed. This feed may not be the unmodified full schedule either. (Mike Gingell via Internet News)

LATE NIGHT TV--The big American media news this week is the launching of the "Late Show with David Letterman" on CBS television, in direct competition with Jay Leno and "The Tonight Show" on NBC. Letterman was doing a later night show on NBC, but quit when the network gave "The Tonight Show" to Leno after Johnny Carson retired.

Speaking to National Public Radio after the first broadcast, the media critic for "Rolling Stone" magazine, Jon Katz, commented that the situation today is totally different than when the "Tonight Show" first when on the air. Then, there was no competion. Today, besides "Tonight" and the new CBS program, Chevy Chase will be doing a similar program for the Fox Network, ABC has its "Nightline" news program, and there are dozens of cable and satellite film and specialty channels, as well as the ubiguitous video cassette recorder. The audience is fragmenting.

FUTURE MEDIA--Michael Crichton, author of the books behind the current hit films "Jurrasic Park" and "Rising Sun", goes beyond this in an article in the September issue of "Wired" magazine. Referring to what he calls "The Mediasaurus", Crichton says "the next great American institution to find itself obsolete and outdated, while obstinately refusing to change" could be "The New York Times" and the commercial television networks. Praising CNN and C-SPAN (which broadcasts live from the American Congress and government agencies), he compares the traditional broadcast media to the days when all telephone calls had to be placed through operators.

Crichton criticises the media for oversimplfying the issues, and suggests that once the proposed American fiber optic highway is in place, subscribers will be able to access all the information they want, unfiltered by the press and networks.

One example of how media is changing is a computer program called "Journalist" that can be used with the CompuServe online information service. This program allows the user to lay out a personal "newspaper", with space for news on particular subjects of interest. When running, the program automatically phones up CompuServe on a regular basis, for example every morning, downloads the news of interest, and prints out a customized "newspaper".

WEATHER SATELLITES:

NOAA--Controllers have lost contact with the newest U.S. weather satellite. The satellite, NOAA-13, was last contacted at 2315 UTC August 21st, according to the National Oceanic and Atmospheric Administration. The polar-orbiting satellite was launched by the Air Force on Aug. 9 and had been operating successfully until contact was lost, officials said. The satellite was designed to help monitor the earth's oceans and atmosphere, and joined satellites NOAA-11 and NOAA-12 in polar orbits. Polar orbiting satellites arc in a circle around the planet as it turns beneath them, permitting a view of the entire planet during the course of a day. The two older satellites continue in operation, NOAA officials said. (AP)

USA/EUROPE--American and European weather forecasters have agreed to protect each other's weather forecasting operations when either side loses a major weather satellite. Meanwhile, hopes were fading for contacting a U.S. weather satellite that went dead last weekend. According to Jim Elliott of the National Aeronautics and Space Administration, "We have established a board to investigate what we consider to be a failure". But he says scientists are still sending signals in hopes of getting a response from satellite NOAA-13, which is orbiting the Earth from pole to pole at an altitude of 540 miles. Elliott says the problem with the USD 62 million weather satellite appears to be a short in the electrical system, preventing the solar panels on the satellite from recharging its batteries.

Loss of the weather satellite should not cause any problems in weather forecasting or tracking hurricanes. Two similar satellites, NOAA-11 and NOAA-12, remain in operation.

The United States already has borrowed a European satellite, which is replacing a failed American GOES satellite in monitoring hurricanes, tropical storms and other weather. Normally the United States operates two GOES satellites, in fixed positions over the equator, to observe weather systems every half-hour. Meteosat-3 was borrowed in February when one of the American satellites failed.

The new agreement calls for the United States and the European weather agency to each keep two stationary satellites in operation, and for each to reposition its instruments to help the other in the event of failure. The agencies have cooperated previously. The United States also borrowed Meteosat-3 in 1991, and before that allowed the Europeans to use a GOES satellite when Meteosat-2 failed.

The European agency plans to launch a new Meteosat in November and NOAA has scheduled launches of new GOES satellites next April and in 1995. The geo-stationary satellites orbit the Earth at an altitude of 22,000 miles. They rotate around the Earth at the same rate the planet spins, thus remaining over the same spot all the time. (AP)

MEDIUM AND SHORTWAVE:

AZERBAIJAN--Azerbaijan Radio's Second Program was heard carrying a 15 minute news program in English at 19:00 hrs UTC on 4958 and 15240 kHz. This English-language program is in addition to Azerbaijan Radio's English Service to

Europe, known as Radio Dada Gorgud, which is broadcast 17:00-18:00 hrs on 15240 kHz. (BBC Monitoring)

ESTONIA--One of the few international broadcasters with programming in Swedish has been forced to close down completely. Estonian Radio is discontinuing all programs in foreign languages from Radio Estonia, beginning October 1st. Estonian Radio has been been broadcasting in Finnish, Swedish and English on shortwave and mediumwave for decades.

This comes as a bit of a blow to Finland's University of Tampere, which has been working with the Estonian Radio for about three years. Students from the university's Department of Journalism and Mass Communication have been working at the Finnish language department of Radio Estonia. They have read news, made radio programs and taught Western radio journalism to their Estonian colleagues. Now this exchange comes to its end. (Jorna Manyla, Finland, James Robinson, and BBC Monitoring)

KUWAIT--Kuwaiti Radio has been testing a new 600 kW transmitter on 540 kHz. (BBC Monitoring)

LITHUANIA--Baltic Radio International will be on the air "this summer", says the general manager of the radio station, Mr. Paul Rusling.

This commercial radio station is to broadcast on 684 kHz with a power of 200 kW from a transmitter site in Palanga, Lithuania. The antenna is directed towards Oslo with side lobes targeted towards Helsinki, Stockholm and Copenhagen.

BRI has already started building work at its new transmitter site in Lithuania. In January, the British company signed an agreement with the Palanga local administration. In accordance with this agreement, BRI has secured a plot of land for 15 years. Every year they will pay Palanga USD 20000. General director of BRI, Mr. Paul Rusling, gave an interview in which he said that he was not afraid of rivals, but acknowledged that they exist and could hinder the intention to target advertisements in Scandinavia. BRI will build six radio masts, a transmitter building, generator and premises with a reserve studio, all costing GBP 1,400,000. BRI programs will consist of pop music, with several minutes of advertisements every hour. Mr. Rusling has said that the station opening this summer will feature Elton John and other rock stars. ("Lietuvos Rytas" via FDXA "Euronews")

It seems that this strange radio station really will be on the air despite many doubts. However, Scandinavian DXers have heard nothing on 684 kHz, except Radio Baltika, which is a private radio station in St. Petersburg, Russia.

Personally I am rather suspicious about the future of this radio station. Remember that Radio Luxembourg already closed their English channel. The Scandinavian market for a commercial English language radio station is even smaller than that of Radio Luxembourg in the heart of Europe. Furthermore, listening to an AM/medium-wave station in Scandinavia is more a curiosity because everything goes on FM. Finland, Norway and Denmark already have commercial radio stations (exclusively FM stereo) with their share of

advertising market. Commercial radio will be launched in Sweden within coming months. And, finally, the state-owned radio companies in Scandinavia have rather good and popular rock-channels and Norway will have its own from the beginning of October. Thus, BRI will face a hard market if they really want to have listeners and advertisements. They will have approximately the same problems as Radio Luxembourg had with their English channel on 1440 kHz. But perhaps there are so strong market forces behind BRI that they'll overcome these troubles.

It is really interesting to hear what happens on 684 kHz in the near future - if anything happens. (Jorma Mantyla in FDXA "Euronews")

NICARAGUA--According to a commentary on the right wing station Radio Corporacion, the Nicaraguan government has completely neglected its official station, Radio Nicaragua. Power to the station's two transmitters on 620 and 640 kHz has been cut off. Three telephone lines have been disconnected for non-payment. Overtime has not been paid.

Radio Nicaragua has reported that on August 20th an armed group of approximately 15 individuals stormed Radio Corporaction, and machine-gunned the offices of directors and managers, as well as the reception, recording, and master control rooms. (BBC Monitoring)

RUSSIA--The authorities in Tatarstan have decided to begin broadcasts on shortwave, since only 25 percent of the Tatars live in Tatarstan. (Voice of Russia via BBC Monitoring)

SRI LANKA/USA--A Voice of America radio station being built in a remote corner of Sri Lanka has raised fears among fishermen and pitted the local Roman Catholic church against the world's remaining superpower. The fishermen, who have staged vociferous protests to halt construction of the VOA station, fear it may mean American submarines will patrol off the island's north-western coast one day, denying them their fishing grounds. They also fear losing their land to the Americans, who they think may use the VOA station as a cover for a military communications center.

The United States insists the high-powered shortwave transmitters being built on a 400-acre (161-hectare) coconut estate in Iranawila will improve its public radio broadcasts to Asia, Africa and the Middle East, and nothing more. The new facility on the coast, 80 km (50 miles) northwest of Colombo, should be completed by 1995. It is meant to replace existing VOA transmitters which have been broadcasting for 40 years near the capital, the U.S. embassy has said.

The mainly Catholic fishermen say construction work on the project, which began early this year, has damaged their homes, disrupted their lifestyle and threatened their livelihood. The local church has thrown itself behind them and lobbied the government to scrap the project. (Reuters)

UNOFFICIAL BROADCASTING--The Voice of the People of Kurdistan continues to be heard on 4130 kHz, from fade-in around 15:00 hrs UTC until sign-off att 16:25. The main program of the Voice of the People of Kurdistan is heard on around 4095 kHz at around 16:00-18:00 hrs. On April 29th the station

announced it was broadcasting a "Second Program" at 14:00-16:00 hrs on 7265 kHz, although it has not been heard on this frequency. (BBC Monitoring)

PUBLICATIONS:

Two very interesting newsletters about satellite broadcasting are available over data networks. Both of which are used extensively in compiling "MediaScan", and we'd like to thank both for making themselves available to us.

SATNEWS--SatNews is huge, so big that the fortnightly uploads have to be divided into three files. There's probably more here about the electronics and satellite industries than any one person wants, but all the important news is included. Editor Darren Ingram does a great job, but since he's sold the publication to a commercial company, it caters to business interests, at business prices. Fortunately they offer a special rate to non-commercial subscribers: only GBP 50 or USD 100 for one year to an Internet-compatible mailbox. If you need this kind of information, it's well worth it. You can contact SatNews at the Internet mailbox satnews@cix.compulink.co.uk for more information.

SKY GUIDE--Skyguide is a short weekly newsletter covering satellite and cable broadcasting, concentrating on the UK. Fortunately, it's free. You can find Skyguide every week on London's CIX conferencing system, in the Skyguide conference, the Fidonet Satellite TV echo, and the Packet Radio Network. Skyguide is now available on the internet in the alt.satellite.tv.europe newsgroup. Comments, suggestions, stories and monetary donations are always appreciated. You can contact Skyguide in the following ways:

CIX : mail to bignoise, or use the Skyguide/comments conference.
Fidonet : Netmail to ANTONY PURVIS at 2:251/22, or leave a message in the Satellite TV echo.
Internet: bignoise@cix.compulink.co.uk

Sweden Calling DXers is the world's oldest radio program for shortwave listeners. Radio Sweden has presented this round-up of radio news, features, and interviews on Tuesdays since 1948.

Radio Sweden broadcasts in English:

Europe and Africa:

15:00 hrs on 1179 khz (weekdays only)
16:15 hrs on 1179 and 6065 kHz
17:30 hrs on 1179, 6065, and 9645 kHz
20:30 hrs on 1179, 6065 and 9655 kHz
21:30 hrs on 1179 and 6065 khz, and
22:30 hrs on 1179 and 6065 kHz

Middle East and East Africa:

15:00 hrs on 15190 kHz and
17:30 hrs on 15270 kHz

Asia and the Pacific:

12:30 hrs on 15240 and 21500 kHz
22:30 hrs on 11910 kHz and
01:00 hrs on 9695 and 11820 kHz

North America:

15:00 hrs on 15240 and 21500 kHz and
02:00 hrs on 9695 and 11705 kHz

South America:

00:00 hrs on 9695 kHz

The broadcasts at 12:30, 16:15, 17:30, 20:30 (weekends only), 21:30, and 22:30 hrs are also relayed to Europe by satellite:

Astra 1B (19.2 degrees East) transponder 26 (Sky Movies Gold/TV Asia/Adult Channel) at 11.597 GHz, audio subcarrier at 7.74 MHz,

Tele-X (5 degrees East) (TV4 transponder) at 12.207 GHz, audio subcarrier 7.38 MHz.

Contributions can be sent to DX Editor George Wood by fax to +468-667-6283, from Internet, MCI Mail or CompuServe (to the CompuServe mailbox 70247,3516), through the FidoNet system to 2:201/697 or to SM0IIN at the packet radio BBS SM0ETV.

Reports can also be sent to:

Radio Sweden
S-105 10 Stockholm
Sweden

Contributions should be NEWS about electronic media--from shortwave to satellites--and not loggings of information already available from sources such as the "World Radio TV Handbook". Clubs and DX publications may reprint material as long as MediaScan/Sweden Calling DXers and the original contributor are acknowledged, with the exception of items from BBC Monitoring, which are copyright.

We welcome comments and suggestions about the electronic edition, Sweden Calling DXers, and our programs in general.

Thanks to this week's contributors Good Listening!

215. TheNet X1J now on the net

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-04 07:44:03 UTC
From: dave@llondel.demon.co.uk
Message-ID: <747153843snx@llondel.demon.co.uk>
Source record: 51730
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.packet

I got my copy of the release version of X1J yesterday, and it is now
available for ftp from ftp.demon.co.uk (/pub/ham/x1j.exe). If anyone
wants to put copies on other sites then please do so!

Dave
--

****
* G4WRW @ GB7WRW.#41.GBR.EU AX25 * Start at the beginning. Go on *
* dave@llondel.demon.co.uk Internet * until the end. Then stop. *
* g4wrw@g4wrw.ampr.org Amprnet * (the king to the white rabbit) *
****

216. TAPR-2 to radio pin out

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-04 23:03:38 UTC
From: quoi@netcom.com
Message-ID: <quoiCCuqq2.D8K@netcom.com>
Source record: 51699

I have put together a MacPacket modem and would
like my radio out to be compatible with TAPR-2
wiring. Does anyone know what the radio pin out
standard for TAPR-2 is? I know that it is a din-5,
but I have found no other information...

please send replies by e-mail. thanks.

217. Internet <--> Packet gateway information

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-05 00:52:26 UTC
From: pat@Tandem.com
Message-ID: <CCuvrF.9o1@tandem.com>
Source record: 51701

N6QMY/BBS Internet Gateway Operating Instructions
April 11, 1993

LOCAL USERS:

Local users are those that log into the bbs via the bbs's telephone modem port (510-795-xxxx) or via one of the 4 tnc ports (145.09, 145.79, 223.62, or 441.50). Each local user has a bbs account that is used to customize how the bbs interacts with the user.

Local users can set their account up so that all incoming mail addressed to their call will be forwarded via a gateway to internet and on to other networks (mcimail, compuserve, etc). All the user needs to do is enter his email address and turn the feature on.

EMAIL bob@hal.com
EMAIL ON

When the EMAIL feature is turned on the packet message will be deleted at the time of forwarding through the gateway. So care should be taken that the paths are correct prior to turning the feature on, for instance enable it, send a test message, and disable it. After a successful transfer re-enable the feature. To disable the auto forwarding feature simply type:

EMAIL OFF

Messages can be sent by packet users to the internet users via the gateway. This applies to users at N6QMY as well as users at other bbs's. Begin by sending a message to IPGATE@N6QMY with the first line of the message being the letters "To:" followed by the internet address of the recipient.

KB6UCZ de N6QMY >
sp ipgate@n6qmy
Enter your subject:
Meeting?
Enter your message body:
To: bob@hal.com
Are you planning to attend the club meeting on Thursday? Give me
a call. 73, Theresa
^Z

NOTE: That the recipient cannot respond to the message unless they are a ham and registered with the gateway. He/she becomes registered by sending a message from his internet host to gateway-request@lbc.com.

REMOTE USERS:

Remote users are those that do not log into N6QMY directly but merely
appear from the packet world to use it as home. If a packet user checks
the "White Pages" for a remote user the entry comes back as @N6QMY.
The packet user then address his message to YOURCALL@N6QMY and the
bbs will do the translation and forwarding to internet.

It is not necessary for a person to know your actual internet address
nor use the SP IPGATE method described above. From the packet network
it appears that you are just another user at N6QMY.

WHITE PAGES:

The "White Pages" is a distributed database of all the bbs users. Most
bbs users in the US are represented in the database as well as many from
other countries. When a user chooses a home bbs, that bbs generates
an update that is sent to the regional servers and then distributed to
all the other bbs's. An entry consists of; call, home bbs, first name,
zip, city and state. When a user wishes to send another packet user
a message he/she consults the white pages (WP) for the home bbs.

REGISTERING:

Before a user, both local and remote, can send a message from internet
into the bbs system he/she must register with the gateway. This is done
by sending a message from the host that he/she intends to use to
gateway-request@lbc.com with the following information:

CALL:
FIRST NAME:
CITY & ST:
ZIP:

HOME BBS:

When a request is received the "From" field is copied directly into
a file with the requesters call. Whenever the gateway receives a message
bound for packet it scans this file comparing on the "From" field. When a
match is found the gateway uses the associated call from then on. If
there is no match the mailer bounces the message with a one-liner
indicating the the user must register.

If you currently use another bbs as home this needs to be stated
in the request. Otherwise you will be assigned N6QMY as your home.
If you choose not to use N6QMY as your home you must make sure
people know to send your message to YOURCALL@N6QMY to pass through
the gate. Your WP entry will be wrong.

EXECUTING BBS COMMANDS REMOTELY:

Many of the commands available to local users is also available to
remote users by sending a message to the bbs. Here is a subset of
the commands currently available.

LIST listing messages
LOOKUP look up calls in the on-line callbook
WHO call dump a users account information
READ read messages and files
USERS n display the last n users to connect to the bbs
INFO display manual pages of various topics
CD change directories in the file system
LS/DIR display the contents of a directory
WP call look a user up in the "White Pages"
HELP get help on how to use a command

Not all commands available to local users can be accessed via the gate. All interactive commands are disabled as well as commands that modify the users account.

The command parser for the bbs is very powerful and the user can form very complex requests. For instance the following command is valid on the bbs:

LIST LAST 20 BULLETINS FROM N6QMY
LIST ALL BULLETINS ABOUT KENWOOD

The ABOUT keyword is used to search the subjects of messages for a given pattern, in this case KENWOOD. It can appear anywhere in the subject line.

This is an example of how complex all the commands can become. They can also be abbreviated down to the level understood my most other bbs programs. Any of the following will give the same results.

L< N6ZFJ
LIST FROM N6ZFJ
LIS < N6ZFJ
L FR N6ZFJ

In most cases a minimum number of unique characters is needed to distinguish a command.

You can get a list of commands and a translation chart from the W0RLI BBS command set to the N0ARY BBS command set by typing the following commands:

INFO COMMANDS
INFO W0RLI

Other commands that you may wish to execute are:

INFO MANUAL
HELP HELP
HELP LIST

Now that you know what some of the commands are this is how you go about executing them. You send a message to cmd@bbs.lbc.com with your commands entered one per line or separated by semicolons. For example if you want to know if three of your buddies are in

the white pages and if the bbs has any messages about the ICOM W2A.

Send to:
cmd@bbs.lbc.com

Subject: you can put anything here
wp n0ary n6zfj n6une
list all about w2a
.

The bbs will execute the commands and respond to you via return mail.

SENDING MAIL TO PACKET:

Once registered the user is free to begin using the gateway to send
messages from his host through the gateway into the packet world.
How much you have to specify of a users address depends on how much
the bbs already knows about the user.

If the bbs knows the home bbs of the user and his home bbs is know to
the N6QMY bbs, which many of them are, you simply need to supply
the call of the user.

n6oim@bbs.lbc.com

If the N6QMY bbs doesn't know of the user but does know where his
home bbs is, then you need to supply just the home bbs call in
addition to the users.

n6oim%n6iiu@bbs.lbc.com

Notice that the call and home bbs are separated by a percent sign '%'
rather then the '@' which is used in the packet domain. This is because
the '@' has a meaning in the internet address.

If the N6QMY bbs has no knowledge of either the user or his home bbs,
then you probably have the wrong home bbs or it is a new bbs. In which
case you will have to supply the full address so the bbs will know
how to route the message.

n6oim%n6iiu.#nocal.ca.usa.na@bbs.lbc.com

This level of addressing is hardly ever needed and normally means that
the home bbs is in error.

Bulletins can be sent in a similar fashion. The address is made up
of a keyword, which can be any six character word and a distribution.
Distributions are local to an area. For instance SBAY is valid in
northern CA, it probably has no meaning at all in Topeka, KS.

Valid distributions are:
ALLUS please avoid this one
ALLUSW all western US
ALLCA all California, any 2 letter state should work

So if you trying to find a cw filter for a Kenwood TS440.

Send to:
want%allca@bbs.lbc.com

Subject: Kenwood TS440, CW filter
If you have one of these you are willing to part with please
give me a call or leave message, thanks.
73, KB6UCZ@N6QMY.#NOCAL.CA.USA.NA
.

Be descriptive, brief, and always include your full return address in
the message. Also please try to limit your distributions to small
regions. Using the ALLUS distribution really slows down the flow of
messages.

INFO ON THE N6QMY BBS:

The bbs came into being in April of 1993 and was the second one anywhere
to run the N0ARY BBS code (the first being N0ARY himself). The bbs has
4 rf ports, 1 phone port, the internet port, and is working on a voice synthesizer port.
The latter would allow users to check for messages
via DTMF from their handhelds.

The bbs itself runs on a Sun workstation under Unix. The code was
written by Bob Arasmith (N0ARY) to focus on the user. Great care was
taken to make the bbs very forgiving to the novice user but very flexible
and powerful for the old-timer. The bbs can be configured to interact
with each user differently. Some examples are:

* List messages in either descending or ascending order.

* Specify a list of keywords that the user wishes not to see displayed
when a list is performed, similar to a kill file.

* .signature and .vacation files.

* Specify how many lines the users terminal is capable of displaying
before scrolling, the bbs will feed info this many lines and pause
allowing the user to catch up and continue or abort the operation.
Similar to more.

* Users can put commonly executed commands in keystroke macros that
are accessible via a single keystroke.

A manual is currently available describing the commands and their
permutations. This manual will be available later this year as a
postscript file. Run the command INFO MANUAL to learn how to get
one via the post office. It is not available in an ascii format.

If you have any questions about the internet gateway or the bbs
in general please drop me a message.

73, -pat
n6qmy@n6qmy.#nocal.ca.usa.na

pat@lbc.com

218. G8BPQ Again Sigh :-)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-06 02:32:24 UTC
From: dan@aznet.stat.com
Message-ID: <P5LF0B1w165w@aznet.stat.com>
Source record: 51703

Hello All,
I posted some time ago about trying to reach G8BPQ. I received a variety
of responses...I also sent to each of them...1 responded and then disappeared.
I am still looking to establish some sort of link to G8BPQ. Does he have
an internet address, if so, what is it? Or, does he have a PACKET Address
that is good? Also, are there any internet<==>packet gateways in Europe
if he has a good packet address?

All help would be greatly appreciated.

Best 73's de Dan N7MRP

Internet: dan@aznet.stat.com
Ax.25: n7mrp@n7mrp.az.usa.na
Voice: (602) 956-2566

219. Re: Ham-Digital Digest V93

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-06 09:47:28 UTC
From: n_watkinson@mac.co.umist.ac.UK
Message-ID: <9309061651.AA00972@ucsd.edu>
Source record: 51705

Reply to: RE>Ham-Digital Digest V93 #31
G8BPQ, John Wiseman runs a packet cluster under the callsign of GB7BPQ. I don't know about the mail capabilities of clusters too much but maybe you can reach him there.

His bbs address is @GB7BAD.GBR.EU

If you have trouble reaching him on packet from over there you can send any message to me and I'll inject it into the UK network here - about 3 hops from GB7BAD.

Nigel G0NGL, sysop GB7NWP.#16.GBR.EU
nigel@sna.co.umist.ac.uk

Date: 6/9/93 14:40
To: Nigel Watkinson
From: Ham-Digital@UCSD.Edu

Ham-Digital Digest Mon, 6 Sep 93 Volume 93 : Issue 31

Today's Topics:
G8BPQ Again Sigh :-)

Send Replies or notes for publication to: <Ham-Digital@UCSD.Edu>
Send subscription requests to: <Ham-Digital-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Digital Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-digital".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Sun, 05 Sep 93 19:32:24 MST
From: swrinde!gatech!asuvax!ennews!stat!aznet!dan@network.ucsd.edu
Subject: G8BPQ Again Sigh :-)
To: ham-digital@ucsd.edu

Hello All,
I posted some time ago about trying to reach G8BPQ. I received a variety of responses...I also sent to each of them...1 responded and then disappeared. I am still looking to establish some sort of link to G8BPQ. Does he have an internet address, if so, what is it? Or, does he have a PACKET Address that is good? Also, are there any internet<==>packet gateways in Europe if he has a good packet address?

All help would be greatly appreciated.

Best 73's de Dan N7MRP

Internet: dan@aznet.stat.com
Ax.25: n7mrp@n7mrp.az.usa.na
Voice: (602) 956-2566

End of Ham-Digital Digest V93 #31
****

220. ZL DATA NEWS 05 SEPT 1993

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-06 10:41:11 UTC
From: carl@codewks.nacjack.gen.nz
Message-ID: <$7344_zl1ab@ampr.org>
Source record: 51550
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.info

```
From : ZL1AVY
To : NEWS @NZ
Type/status : B$
Date/time : 04-Sep 18:05
BID (MID) : 7344_ZL1AB
Message # : 7344
Title : ZL DATA NEWS SEPT 05 1/3

-----------------------------------------------------
DATA DATA DATA DATA DATA DATA DATA DATA DATA DATA DATA
DATA DATA ................................ DATA DATA
DATA DATA . . DATA DATA
--------- . THE WEEKLY NEWSLETTER OF . ---------
NEWS NEWS . THE ZL DATA GROUP . NEWS NEWS
NEWS NEWS ................................ NEWS NEWS
NEWS NEWS NEWS NEWS NEWS NEWS NEWS NEWS NEWS NEWS NEWS
-----------------------------------------------------
TRANSMITTED BY ZL1AVY AUCKLAND SEPT 05 1993

THIS IS A WEEKLY UNOFFICIAL BULLETIN OF NEWS AND VIEWS FROM ZL
AMATEURS. IT DOES NOT REPRESENT AN OFFICIAL VIEWPOINT, AND ALL
OPINIONS ARE THOSE OF THE CONTRIBUTOR.

DATA THROUGHPUT ON PACKET - a difficult concept
---------------------------------------------- from ZL1DDL

In some recent discussions with fellow packeteers I had to realize
that there is a lot of talking about 'throughput' of certain systems,
or under certain channel situations. But do we really know what we
mean when we use the word ?.

Let's start with a simple example : you're logged into a BBS on a
direct user access frequency. Let us also assume that you're alone on
the frequency (except for the BBS) and that your link is so good that
no packet gets lost due to noise. Now imagine that you're issuing a 'R
1234' command to download the bulletin number 1234. What will happen ?

First ( BayCom users and some others can see this on their monitor
screen), your station will send an info packet to the BBS. It will
consist of the 'R 1234' the data, which accounts for six bytes, and a
header of about 20 bytes. This is the packet's information content.
So we have about 26 bytes, eight bits each, which gives us around 208
bits. Ready for transmission ? Not quite. Before the frame can be sent
out, another process takes place: bit stuffing.
```

Why that ? Well, the receiving TNC needs some means of actually synchronizing itself with your baudrate, which may differ slightly from 1200 Hz. For this, it needs a regular feature in your bit stream. In our case, that's provided by a zero bit which is inserted after each five bits. 'One' bits are always transmitted as a continuous tone while a 'zero' is denoted by a change between the two tones. This way having a regular 'zero' transition occuring, the TNC receiving the packet can synchronize itself with the transmission.

To account for those extra bits, we need to add another 20 per cent to our bits, which leaves us with about 250 bits in the frame. Luckily, this 'packing' process takes almost no time in a modern computer or TNC, so we'll neglect this delay for a moment. Transmitted at 1200 Bd the packet itself will take 208 ms to get transmitted. But stop - that's not all: before transmitting, your TNC will wait about 100 - 300 ms for a clear channel (assuming that the BBS has almost zero TX-RX switching time), and only then it will key up. Most packeteers use DWAIT to control this.

Hm, we're still not on air. There is this dreadful other parameter, called TXDELAY. With a modern rig and a software squelch on both sides this should be no longer than 200 ms, to cover the time your transmitter needs to key up. Bingo: our transmission has taken place. It has taken us over 700 ms to transfer six bytes of data (well, make that seven with a RETURN at the end...). This is a bit rate of just about 80 bits or 10 bytes per second. Not a good through-put, one might say. Actually, the figure is almost meaningless - what you're really interested in is how long it takes to get a reply from the BBS:

(to be continued)

--- End of message #7344 to NEWS from ZL1AVY ---

From : ZL1AVY
To : NEWS @NZ
Type/status : B$
Date/time : 04-Sep 18:06
BID (MID) : 7345_ZL1AB
Message # : 7345
Title : ZL DATA NEWS SEPT 05 2/3

CHRISTCHURCH JOTTINGS
---------- SENT BY ZL3CS
AT A RECENT SPECIAL GENERAL BRANCH MEETING OF 05, A GENUINE ATTEMPT WAS MADE TO CLEAR THE WAY FOR ACCEPTING CLUB ASSOCIATES. IN THE CHAIR FOR THIS SPECIAL OCCASION RON, ZL3VX HANDLED A DIFFICULT TASK ABLY AND SMOOTHLY. A DRAFT OF A NEW CONSTITUTION FOR THE CLUB WAS FINALLY COMPLETED SHORTLY AFTER 10 PM. A GENERAL MONTHLY MEETING FOLLOWED BY A WELCOME CHEERFUL CUPPA COMPLETED THE EVENING. HAMMERING A NEW CLUB CONSTITUTION INTO SHAPE, IS NO EASY TASK AND THE MAIN BLACKSMITHS, ZL3VX AND ZL3FU, MUST BE COMPLIMENTED ON PRESENTING A DRAFT COPY, WHICH REQUIRED ONLY FINE TUNING TO BE ACCEPTABLE TO SOME 30 PLUS CRITICAL,INTERESTED MEMBERS. THE ATTENDANCE WAS DOWN BY COMPARISON TO

THE USUAL NUMBERS DRAWN BY THE EVENING TOPICS. A FURTHER REPORT
CONTAINING SPECIFIC INFORMATION ON THE CONSTITUTION UP-GRADE SHOULD
BE AVAILABLE, AT A ROUGH GUESS, ABOUT CHRISTMAS TIME.
73 DE GUTHRIE.

PACKET CHANGE TO 80 METRES
-------------------------- from ZL1AQ

WITH CONDITIONS SO POOR ON 40 METRES A CHANGE TO 80 METRE PACKET WOULD
SEEM TO BE THE RIGHT MOVE.RECENTLY SELCAL(BAUDOT) WAS SHIFTED FROM 40M
TO 80M AND THE RESULT HAS BEEN FAR BEYOND EXPECTATIONS.
PACKET ON 80 METRES COULD BE RUN BETWEEN 3630 AND 3640,TO SUPPORT THE
SUGGESTION ON PAGE 97 OF THE CALL BOOK.
SOME OPERATORS MAY WISH TO USE 3635.5 OR 3638.9-A SIMILAR PATTERN TO
40M. TO GET THE CHANGE OFF THE GROUND IT MAY SAVE PERSONAL TIME IF
CALLS ARE MADE RIGHT ON THE HOUR,ESPECIALLY 8 O'CLOCK ON.

73 DE GORDON ZL1AQ.

WHERE ELECTRONS GO
------------------ FROM ZL1ACS
(DEDICATED TO THE NEWCOMERS GETTING TO GRIPS WITH RADIO THEORY.)

THE PROCESSION OF ELECTRONS PAST ANY GIVEN SPOT,
IS CALLED ELECTRIC CURRENT AND IT MAKES RESISTORS HOT.
IT ALSO HAS MAGNETIC FIELDS WITHIN IT AND AROUND,
AND WE ALWAYS SAY THAT CURRENT GOES FROM POSITIVE TO GROUND.
BUT NOW WE KNOW THERE'S PLENTY OF ELECTRONS IN THE EARTH,
SO POSITIVE POTENTIAL MERELY MEANS THERE'S A DEARTH,
AND ELECTRON FLOW IS OPPOSITE - WITH THIS WE HAVE TO LIVE.
SO WHEN YOU PRESS YOUR BUTTON OR RATTLE ON YOUR KEY,
AND ENERGISE YOUR MASSIVE QUAD OR LONG WIRE TO A TREE -
THE MOVEMENT OF ELECTRONS PAST ANY GIVEN SPOT,
IS WHAT GIVES YOU YOUR POWER - BUT YOU NEED NOT FEEL A CLOT
IF YOU THINK THE CURRENT'S FLOWING DOWN FROM POSITIVE TO GROUND,
OR ELECTRONS GO OFF SIDEWAYS AND THEN SPIN ROUND AND ROUND -
SO LONG AS YOU CAN TUNE YOUR RIG FOR SIGNALS PURE AND TRUE,
AND SOMEONE GIVES AN ANSWER EVERY TIME YOU CALL CQ.
73 DE KEN ZL1ACS

(continued next page)

--- End of message #7345 to NEWS from ZL1AVY ---

From : ZL1AVY
To : NEWS @NZ
Type/status : B$
Date/time : 04-Sep 18:08
BID (MID) : 7346_ZL1AB
Message # : 7346
Title : ZL DATA NEWS SEPT 05 3/3

BAYCOM MODEMS - A WARNING
------------------------- from ZL1DDL

It has come to our attention that some people have been designing modems for use with the BayCom software which use an MAX232 level converter instead of the 74HC04 or 74HC14 inverter chips.

One of these designs appeared in a recent article in 'Amateur Radio' and, as far as we understand, also in another VK magazine.

The BayCom team in Germany conducted experiments on prototype modems with a MAX232 a long time ago, finding that such modems would not run on about 20 % of all machines that a standard BayCom modem would run on. The reason for this is that in a worst case situation, the current drawn from the RS232 interface by the MAX232 designs can be as much as 200% and more than the current consumption of the standard design. Even in a best case situation, the MAX232 circuits will draw significantly more current than the standard modem circuit.

Therefore, the MAX232 design was abandoned in favour of the HCMOS chips. The name of the game was to construct a circuit which would work on the highest possible number of IBM compatible computers. No problems have been reported so far with the transistor circuit used to transform the incoming data for RS232 use.

We therefore recommend that homebrewers should not use MAX232 chips in their modems. Users who found that the MAX232 variety does not work for them should consider using an external power supply for the modem to overcome this problem.

73, Ulrich ZL1DDL
(approved by Johannes Kneip DG3RBU)

COMING UP NEXT WEEK : Part 2 of the series on packet throughput, a story on interfacing by Henry ZL1AAN, News from the regions, TPK and some hints and kinks on it's use.

Thanks to the contributors this week: ZL1DDL,ZL1AQ,ZL1ACS and ZL3CS. That concludes this edition. Items of general interest to data mode users are solicited for future newsletters. Your contribution may be sent via post, RTTY or packet to Alan ZL1-AMW. This broadcast is normally sent at 0930 and 1900 hrs each Sunday on 3545 kHz , first in 75 B Baudot then repeated in Amtor Mode B (FEC).

73 to all from your temporary editor Doug ZL1AVY
107a New Windsor Rd. Avondale, Auckland.

--- End of message #7346 to NEWS from ZL1AVY ---

--
carl@codewks.nacjack.gen.nz (Carl Trommel)
The BBS Works -- +64 9 630 7739 NZL New Zealand's Oldest BBS

221. Packet on a Unix box?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-06 12:13:47 UTC
From: drenze@icaen.uiowa.edu
Message-ID: <1993Sep6.121347.5390@news.uiowa.edu>
Source record: 51704

Has anybody out there successfully run packet (specifically: TCP/IP) on a Unix box? Can the standard TCP/IP package be used, or must a Unix version of the KA9Q TCP/IP package be used and does such a beast exist?

Tnx in advance for any replies.

Peace es 73 de Doug N0Y??
03W 00D 18H 14M and counting...

--
__ /| | Douglas J Renze | Charter Member, Popular Front
\'o.O' | +1 319 337 4664 | for Revolutionary Darwinism:
=(___)= | drenze@isca.uiowa.edu |
U | Douglas-Renze@uiowa.edu | Evolution Now!

222. KA9Q NOSintro/NOSview: Author has new e-mail address

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-06 20:06:52 UTC
From: ian@g3nrw.demon.co.uk
Message-ID: <747346012snz@g3nrw.demon.co.uk>
Source record: 51552

```
========================
CHANGE OF E-MAIL ADDRESS
========================

Please note that I recently changed my e-mail address to:

* * * * * * * * * * * * * * *
* *
* ian @ g3nrw.demon.co.uk *
* *
* * * * * * * * * * * * * * *

(and no longer use the dircon.co.uk address).

If you recently sent mail to me at dircon and didn't get a
reply, my apologies.

And if you need any information on the "NOSview" documentation
package for KA9Q TCP/IP, or on the "NOSintro" book describing
how to set up KA9Q NOS, please e-mail me at the new address.

Ditto if you have any input for me for "PACKET INTERNATIONAL"

73
Ian Wade, G3NRW

+==============================+======================================+
| Ian Wade | E-mail: ian@g3nrw.demon.co.uk |
| DOWERMAIN LTD | [158.152.16.226] |
| 7 Daubeney Close, Harlington, | AX.25: G3NRW @ GB7BIL.#27.GBR.EU |
| Dunstable, Beds LU5 6NF, UK | AMPRnet: g3nrw.ampr.org [44.131.5.147] |
+==============================+======================================+
```

223. Internet <--> Packet-Radio (help pls)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-06 21:33:34 UTC
From: jbrhebergen@et.tudelft.nl
Message-ID: <1993Sep6.233334.1051@et.tudelft.nl>
Source record: 51706
Cross-posted to: nlnet.misc,rec.radio.amateur.digital.misc

Hi there,

I would like to e-mail a friend of mine abroad who can only be
reached via packet-radio. In order to do that I would need the
internet address of a `Internet <---> Packet-radio' Gateway.
(preferrably in The Netherlands). Can anybody help me in this
respect? Thanx very much!

Regards, Jan Rhebergen.

224. Re: Packet on a Unix box?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-07 00:44:49 UTC
From: rich@mulvey.com
Message-ID: <930906.204449.6G2.rusnews.w165w@mulvey.com>
Source record: 51707

drenze@icaen.uiowa.edu (Douglas J Renze) writes:

> Has anybody out there successfully run packet (specifically: TCP/IP) on a
> Unix box? Can the standard TCP/IP package be used, or must a Unix version
> of the KA9Q TCP/IP package be used and does such a beast exist?
>
Yup, you can. Look for WAMPES on Archie - I know that it has been ported
to Linux, and probably most other Unices, as well.

- Rich

--
Rich Mulvey Amateur Radio: N2VDS 787 Elmwood Terrace
rich@mulvey.com Rochester, NY 14620

225. DRSI attach line for NOS

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-07 02:10:04 UTC
From: gdo@aloft.att.com
Message-ID: <CCyoot.lr3@cbnewsm.cb.att.com>
Source record: 51708
Cross-posted to: rec.radio.amateur.packet,rec.radio.amateur.digital.misc

I just got a DRSI PCPA Type 1 interface for my PC. For those unfamiliar with the PCPA cards, they are dual-port packet interfaces built on a PC card. The Type 1 has a full-blown 1200 baud modem on one port and a serial interface on the other. I'll be attaching a 9600 bps modem on this port soon.

Anyhow, the software that comes with the card works fine, allowing the card to function as a nice AX.25 TNC. I wish to use it on my TCP/IP node which is running the PA0GRI version of NOS. The documentation claims there is a "attach drsi" type command, but the software says there is no such animal. Upon further investigation, it looks like the "attach scc" command is what I should use. Given the syntax of the command, I set up the following lines in my autoexec.nos file:

```
attach scc 1 init 0x300 8 2 0 1 0xff 7 p4915200 8
attach scc 0 ax25 dr0 512 1200 1024 n3bda-10
attach scc 1 ax25 dr1 512 9600 1024 n3bda-12
```

NOS seems to like this, but when I go to connect, my XMTR output is an ear-piercing continuous tone instead of the familiar buzz of data.

The base address is indeed 0x300 and the IRQ is indeed 7 with no conflicts. The clock speed spec was vague in the NOS manual, but the PCPA manual states the SCC clock rate at 4.9152 MHz. Nos wants it specified in Hz.

What am I doing wrong?

TNX ES 73
--

Glenn D. O'Donnell, N3BDA Internet: gdo@aloft.att.com
AT&T Bell Laboratories Packet: n3bda@n3dpu.#epa.usa.na
Allentown, PA Home QTH: Palmerton, PA

226. TCP/IP and BAYCOM, HELP

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-07 04:09:51 UTC
From: da884@cleveland.Freenet.Edu
Message-ID: <26h1if$3ei@usenet.INS.CWRU.Edu>
Source record: 51709

I've tried to get NOS working with the BayCom modem with no luck
don't know if it's just the way I'm setting it up or what.

But if there is someone out there that has some good luck with it
and has it up and running could you PLEASE send me a copy of you
AUTOEXEC.NOS and let me know what NOS are you running. I'ld like
to give it one more go at it.

Thanks in advance,

73's de ve3tos

227. BPQ for Data Engine Terminal configuration

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-07 07:28:59 UTC
From: steve@matt.ksu.ksu.edu
Message-ID: <26hd7rINNcgk@matt.ksu.ksu.edu>
Source record: 51710

I have been running the G8BPQ networking software on my DataEngine for some time now, but as of yet has not figured out the best terminal settings for the DataEngine's serial port. I have tried 9600 bps, 8 data bits, 1 stop bit, no parity, half-duplex, with translate CR to CR/LF, but it still does not work well.

For those not familiar, the BPQ Networking software emulates a TNC2 on the serial port of a DataEngine. Since I have no idea what commands are available on this "Virtual TNC2" interface, I don't know how to properly set up the terminal.

What are the proper terminal settings and commands for a DataEngine running BPQ?

-Steve Schallehn KB0AGD
Kansas State University

228. Alinco ALR22 and 9600 bd

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-07 09:14:36 UTC
From: johna@icsbelf.co.uk
Message-ID: <CCz8CD.owo@icsbelf.co.uk>
Source record: 51711

Hi all,

I wonder if anyone has managed to connect an Alinco ALR22 (E or A model) to
a g3ruh 9600 baud modem, or any other type of 9600 baud modem. I shall
be attempting this in the near future, and I would appreciate any
information. Basically I need information on where to tap into for
the transmit and receive audio.

Thanks in advance.
--

John Agnew, | johna@icsbelf.co.uk
ICS Computing Group Ltd, | ...!uknet!icsbelf!johna
Belfast (Northern Ireland) | Gi6IRL@GB7TED.GBR.EU [44.131.15.11]

229. Re: Internet <--> Packet-Radio (help pls)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-07 15:50:47 UTC
From: david@stat.com
Message-ID: <cJki0B4w165w@stat.com>
Source record: 51721
Cross-posted to: nlnet.misc,rec.radio.amateur.digital.misc

How to Use the WB7TPY
Packet <-> Internet Gateway

First, some brief operational notes:

(1) Messages must not contain any foul language, or commercial purpose.
(2) Messages can only be sent to countries that the United States has
a third-party agreement. All others will be destroyed.
(3) Messages from the internet should be less then 5K in length.
No files should be sent.
(4) If you have questions, please do not hesitate to contact me either on
packet radio: WB7TPY@WB7TPY.AZ.USA.NA -or-
Internet : david@stat.com -or-
Fidonet : David Dodell @ 1:114/15

(5) Have fun. Use the gateway as much as you like. That is what it is
there for.

From Internet to Packet

Send mail to the internet address of:

gate@wb7tpy.ampr.org

The first line of text must contain a full packet address, preceded with the
word "Packet:"

For example, mail to my packet address, would have the first line of text;

Packet: wb7tpy@wb7tpy.az.usa.na

From Packet to Internet

Send as private mail (never a bulletin) to the packet address of:

gate@wb7tpy.az.usa.na

The first line of text must contain a full domained internet address,
proceeded with the word "Internet:"

For example, mail to my internet address, would have the first line of text;

Internet: david@stat.com

Internet: david@stat.com FAX: +1 (602) 451-6135
Bitnet: ATW1H@ASUACAD FidoNet=> 1:114/15
Amateur Packet ax25: wb7tpy@wb7tpy.az.usa.na

230. Re: DRSI attach line for NOS

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-07 16:33:37 UTC
From: jack@jspitznagel.utmem.edu
Message-ID: <CCzso3.JAv@dptspd.sat.datapoint.com>
Source record: 51712

In article <CCyoot.Ir3@cbnewsm.cb.att.com> gdo@aloft.att.com (Glenn D. O'Donnell) writes:

> attach scc 1 init 0x300 8 2 0 1 0xff 7 p4915200 8
> attach scc 0 ax25 dr0 512 1200 1024 n3bda-10
> attach scc 1 ax25 dr1 512 9600 1024 n3bda-12
>
>NOS seems to like this, but when I go to connect, my XMTR output is an
>ear-piercing continuous tone instead of the familiar buzz of data.

Glenn-

Try:
attach scc 1 init 0x300 0 2 0 1 0 7 p4915200 8
^ ^
and:
attach scc 0 ax25 dr0 236 d1200 1024 n3bda-10

etc, etc..... You may find these to work better... I have used this with JNOS with no problem.

73, KD4IZ

231. AARL?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-07 17:45:10 UTC
From: tatum@hotsun.nersc.gov
Message-ID: <Pine.3.07.9309071005.A8374-7100000@hotsun.nersc.gov>
Source record: 51713

What's the AARL's new hams phone number?

Thanks!

Jamie

232. Looking for Amiga Driver/Library

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-07 19:27:02 UTC
From: lawrence@combdyn.com
Message-ID: <1993Sep7.192702.24627@combdyn.com>
Source record: 51717

There are two items that I'd like to find (or see) for the Amiga.

The first is an XPR library that implements YAPP. That way I (we) can use any XPR supporting terminal program and YAPP files around to our hearts content.

The other is an SANA-II device driver for a KISS TNC. That way I (we) can use a real TCP/IP package instead of NOS, and make real use of the Amiga's multitasking...instead of the task switching that NOS tries to do. Of course the driver will have to be packaged with NETROM and AX.25 session support.... somehow.

--
--EMAIL----------PHONE----------FAX----------
| WORK: lawrence@combdyn.com | (403)529-2162 | (403)529-2516 | CallSign
| HOME: dreamer@lhaven.uumh.ab.ca | (403)526-6019 | (403)529-5102 | VE6LKC
----
disclamer = (working_for && !representing) + (Combustion Dynamics Ltd.);

233. ROSE NetWork

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-08 01:54:30 UTC
From: da884@cleveland.Freenet.Edu
Message-ID: <26je0m$490@usenet.INS.CWRU.Edu>
Source record: 51718

```
Where can I get info about the ROSE system they have
running in the states, is there some sort of file out therE?
```

234. TCP/IP frequencies????

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-08 05:32:59 UTC
From: magee@netcom.com
Message-ID: <mageeCD0sr0.IEA@netcom.com>
Source record: 51715

I would like to find out what the standard TCP/IP frequencies
are on 2m and 70cm. Is there any band plan in use?

Steve Magee, N2SM magee@netcom.com

235. Re: SCDX 2186

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-08 06:39:32 UTC
From: tholen@galileo.ifa.hawaii.edu
Message-ID: <CD0vtw.G02@news.Hawaii.Edu>
Source record: 51716
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.digital.misc

> TELEVISION IN SWEDEN--Sweden is the size and shape of California, yet has
> only three national television networks, and no other terrestrial television
> broadcasters. But there is room for many more stations. In comparison, to
> take the example of a small American city, in San Francisco alone there are
> 11 separate television stations.

Shape is largely irrelevant, and I can think of places even larger than
California or Sweden that have fewer television stations (Antarctica, for
example). I would expect population to be the main point of comparison.

And I doubt many San Franciscans regard their city as "small". Does this
11 station figure include the whole Bay Area, that is, Oakland as well?
The whole Bay Area is one of the largest markets in the world.

236. AEA PK232 MBX, TAPR Enhancements, Software for sale

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-08 14:51:05 UTC
From: rdewan@casbah.acns.nwu.edu
Message-ID: <26krgp$1bs@news.acns.nwu.edu>
Source record: 51722
Cross-posted to: rec.radio.swap,rec.radio.amateur.digital.misc

FOR SALE

AEA PK232 MBX, TAPR Enhancements and PkT Gold Software

AEA PK232 MBX
CW,RTTY, AMTOR, VHF/HF Packet, etc
Includes mail box

TAPR enhancements - tested and working fine - all documentation included
9600 baud G3RUH/KN9G modem - great for terrestrial high speed pkt
easily selected using ALTMODEM command
DCD state machine
Allows TNC to be used with squelch wide open - pick out weaker
signals. Tremendous improvement for packet radio. TNC detects
data not by opening of squelch as in conventional operation
but by being able to recover the clock. Makes TNC work for much weaker
signals.
Modem disconnect board

PktGold Software for the AEA232
Registered copy with printed manual

Three radio cables for PK232.

All for $300 including shipping in US. (COD if desired is extra).

Rajiv
aa9ch
Address: r-dewan@nwu.edu

237. Re: DRSI attach line for NOS

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-08 20:17:45 UTC
From: gdo@aloft.att.com
Message-ID: <CD1xpo.LMB@cbnewsm.cb.att.com>
Source record: 51725
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.packet

Many thanks to those who replied to my query on use of my new DRSI interface under NOS. For those who might be interested, here are the correct entries to be included in my autoexec.nos file:

```
attach scc 1 init 0x300 0 2 0 1 0 7 p4915200 8
attach scc 0 ax25 dr0 236 d1200 1024 n3bda-10
attach scc 1 ax25 dr1 236 d9600 1024 n3bda-12
```

I was close, but I messed up some of my parameters. Special thanks to John Spitznagel, KD4IZ who supplied me with the right parameters. I am now working fine. The NOS manual mentions an "attach drsi" command which is supposed to set up a DRSI board. My software choked on this, but as Dennis Jacobson, N6NG pointed out, my copy probably doesn't have the DRSI code compiled in. Many of these features are left out by default to make a smaller executable.

Again TNX to all ... de N3BDA

--

Glenn D. O'Donnell, N3BDA Internet: gdo@aloft.att.com
AT&T Bell Laboratories Packet: n3bda@n3dpu.#epa.usa.na
Allentown, PA Home QTH: Palmerton, PA

238. Baycom and DCD?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-08 20:41:23 UTC
From: chbeck@anl.gov
Message-ID: <chbeck-080993155227@chbmac01.el.anl.gov>
Source record: 51720

In the manual - "Baycom.DOC" the author suggests that it may
be possible to use a DCD (Software carrier detect) device with the
baycom type modems. Has anyone tried this? Here is the note from
"Baycom.DOC" that caught my eye:

CARRIER DETECT WITH XR2211

DCD Diagram Here

Analogue - DCD with XR2211 for 1200/2200 Hz

The design of the Circuit consists of known principals, for problems
with
it see also the already mentioned script MODEMTECHNIK FOR THE
FUNKAMATEUR.
Every time when the PLL is not active, the received Data is able to be
suppressed, it is able to be worked therefore, with open Noise
suppressor
(Squelch). Typically the XR2211 requires approximately 4mA, that is, it
also
possible for this to be supplied from the Serial Port without problems.

Has anyone seen this modification? Please e-mail or post the diagram, or
let me know where I can get (ftp) the files. Thanks.

de wo9k

--

"If I told you all that went down, it would burn off both your ears..."
-Robert Hunter/Jerry Garcia

These thoughts are only my own. CHBeck@anl.gov

239. Is there a shareware/free WEFAX decoding program?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-08 21:05:31 UTC
From: mebly@eng.umd.edu
Message-ID: <26lherINNfdf@mojo.eng.umd.edu>
Source record: 51723

The subject just about says it all...

I have this shiny new MultiMode controller (:-)) which says it will receive and display WEFAX. It did not, however, come with appropriate software.

Is there anything either shareware or, preferably, free which will display this stuff.

Mac or PC is OK.

Please respond via e-mail. If there is sufficient interest, I'll post a summary.

Thanks in advance.

--
Mark Bailey KD4D Motto: Life's too short to drink cheap beer.
mebly@eng.umd.edu Disclaimer: I didn't really say this.

240. Need packet addresses

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-08 23:22:58 UTC
From: rlong@magnus.acs.ohio-state.edu
Message-ID: <26lpgi$mkk@charm.magnus.acs.ohio-state.edu>
Source record: 51726

A VK friend has asked me to get addresses for the following. Can anyone help?

1. GLB Electronics

2. GRAPES (Georgia Radio Amateur Packet Association).

Thanks
Ron w8gus
rlong@magnus.acs.ohio-state.edu

241. RE:BPQ for Data Engine Terminal Configuration

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-09 01:34:39 UTC
From: WG0B@delphi.COM
Message-ID: <01H2PY0MQN0I90QKKH@delphi.com>
Source record: 51724

From: -Steve Schallehn KB0AGD Date: 6 Sep 93 21:28:59 GMT

>some time now, but as of yet has not figured out the best terminal
>settings for the DataEngine's serial port. I have tried 9600 bps, 8
>data bits, 1 stop bit, no parity, half-duplex, with translate CR to
>CR/LF, but it still does not work well.

Steve:

If memory serves, the serial port is run as a KISS or NetRom Serial (NRS) protocol interface when the BPQ node firmware is in control. This allows the node to communicate with another TNC which is either in KISS mode or has a Netrom (compatible) program installed. There is also multidrop kiss, but that is another issue. What I believe is NOT supported is standard ASCII i/o on the serial port which is probably what you are looking for. I am assuming you are talking about running with the AUX switch depressed so that the data engine is using the BPQ node program.

The workaround is to use a terminal program which communicates in the appropriate mode over its serial port (KISS or NRS). I use this approach in my test configuration for JNOS40, and it works just fine. Your terminal becomes another TNC to the BPQ node. Terminal programs which will serve this purpose are any NOS variant or the BPQ node software for the PC.

Drop me a direct line (wg0b@delphi.com) so I can get a good address for you. I have some other things I want to discuss with you.

That's it for now.

73,

Doug Thompson, WG0B

==========

Packet: wg0b@k0hyd.#scks.ks.usa.noam

tcp/ip: wg0b.ampr.org (44.122.0.8)

Internet: wg0b@delphi.com

Telconet: (316) 688-0004

STUFF: Junk we keep..... JUNK: Stuff we throw away

==========

242. Help with FBB bbs system

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-09 13:01:05 UTC
From: jwl@cray.com
Message-ID: <1993Sep9.080106.10701@walter.cray.com>
Source record: 51727

Hi,

I am looking for someone knowledgeable in the FBB bbs system. I am trying to write a fairly simple program to login to a FBB bbs, check for messages, download them (if they are there) and upload messages.

I have downloaded FBB and TPK and looked at the documentation and have found some commands documented that seem to shortcut the upload process. If I recall (docs are at home) the FB or FP command is used to upload a message. I looks like the think I would want to use, but when I try to issue it at the normal prompt, FBB tells me that it is an incorrect command. I suspect you have to put the bbs in a special mode to use this form. I think the command is designed for computer to computer communications, since it appears that it bypasses the multitude of prompts for subject, message body, etc.

Can anyone help? I haven't had too much luck with the sysop. He is pretty busy these days. Is it possible that I have to be identified as someone special to use these commands? Or do I have to get into some special mode before I issue them? I looked at TPK, but that is real overkill for what I want to do. I don't really want to rely on reading ascii text for the right prompts to send things, since it is subject to change. Any tips will be most appreciated.

73,
Jim.
--

Jim Lynch, Sales Analyst, Cray Research, Inc. / ARS: K4GVO
Southeast District, Phone: (404) 631-2254, Email: jwl@sedist.cray.com
Suite 270, 200 Westpark Drive, Peachtree City, GA 30269

243. Internet <--> Packet-Radio (help pls)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-09 13:33:55 UTC
From: jangus@skyld.tele.com
Message-ID: <747581635snx@skyld.tele.com>
Source record: 51731

In article <cJki0B4w165w@stat.com> david@stat.com writes:

> How to Use the WB7TPY
> Packet <-> Internet Gateway

What are you using for this? MS-DOS or Unix operating system. Intel x86 hardware or something else. (Probably Unix) How many tasks are running to support the gateway. How much of the code/executable are available?

Thanks

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "It is difficult to imagine our
Internet: jangus@skyld.tele.com | universe run by a single omni-
US Mail: PO Box 4425 Carson, CA 90749 | potent god. I see it more as a
Phone: 1 (310) 324-6080 | badly run corporation."

244. Re: Mini group for FBB sysop - Why not?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-09 14:06:04 UTC
From: david@stat.com
Message-ID: <T15L0B1w165w@stat.com>
Source record: 51728
Cross-posted to: rec.radio.amateur.packet,rec.radio.amateur.digital.misc

howardl@wb3ffv.ampr.org (Howard Leadmon - WB3FFV) writes:

> I don't actually know how many FBBS users we have here on USENET/Internet,
> but one possible suggestion would be to start a mailling list to handle
> such discussions. I would certainly be in support of this idea, but don't
> believe FBBS discussions warrent a newsgroup.

Actually we have started a F6FBB mailing list on my site, an
announcement should follow tommorrow, but basically if anyone is
interested in subscribing they should send email to:

listserv@stat.com

First line of text should be:

sub f6fbb-list

David

Internet: david@stat.com FAX: +1 (602) 451-6135
Bitnet: ATW1H@ASUACAD FidoNet=> 1:114/15
Amateur Packet ax25: wb7tpy@wb7tpy.az.usa.na

245. TCP/IP frequencies????

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-09 16:48:43 UTC
From: jangus@skyld.tele.com
Message-ID: <747593323snx@skyld.tele.com>
Source record: 51732

In article <mageeCD0sr0.IEA@netcom.com> magee@netcom.com writes:

> I would like to find out what the standard TCP/IP frequencies
> are on 2m and 70cm. Is there any band plan in use?

Give us a hint as to where you are geographically. Or.... you might just turn the radio on and listen around a bit. If you are running ip and in the trace mode, it will id the stations that are running ip and not just plain ax25 packet stuff. It also ids the netrom stuff.

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "It is difficult to imagine our
Internet: jangus@skyld.tele.com | universe run by a single omni-
US Mail: PO Box 4425 Carson, CA 90749 | potent god. I see it more as a
Phone: 1 (310) 324-6080 | badly run corporation."

246. re: Baycom and DCD

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-09 17:02:06 UTC
From: w6swe@w6swe.tapr.ORG
Message-ID: <195@w6swe.tapr.org>
Source record: 51729

wo9k writes:
:In the manual - "Baycom.DOC" the author suggests that it may be possible to
:use a DCD (Software carrier detect) device with the baycom type modems. Has
:anyone tried this?

I think the Baycom folks in Germany sell a version which has a
XR2211 included to provide the DCD function. A better approach, I
would think, would be to try to adapt N7CL's state machine DCD
circuit to the TCM3105 modem on the Baycom board, although I have not
heard of that being done. This was described in his paper at one
of the ARRL Computer Networking Conferences a few years ago, and
also appeared in Packet Status Register. and is available
from TAPR as a kit. I am not familiar with the Baycom circuit, so
don't really know how feasible this would be (it probably won't
fit within the connector shell).

Bob Nielsen, W6SWE Internet: w6swe@tapr.org
Tucson, AZ AX.25: w6swe@kc7cg.az.usa.na
Amateur IP: 44.124.12.16

247. Macintosh Amateur Radio Software - September 1993

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-09 17:42:35 UTC
From: tstader@aol.com
Message-ID: <9309091342.tn36564@ve6mgs.ampr.ab.ca>
Source record: 51549
Cross-posted to: rec.radio.amateur.misc,rec.radio.info,rec.radio.amateur.digital.misc

Macintosh Amateur Radio Software - September 1993
Version 1.03

PLEASE... I COULD USE YOUR HELP! Those of you that can tell me about ANY of these programs working with System 7 would be appreciated! I am going to be adding a System 7 compatability section to EACH description in future releases. If the application will execute properly under System 7, the System 7 anotation will be placed as the last line of the product description. More clarification on levels of System 7 compatibility in the future editions... but this is a start!

The information in this list was gleaned mostly from flyers supplied by the software vendors, or in some cases from reviews in amateur radio publications or the README files included with the archive. Some of the information has not been verified for a long time; please check with the vendors/authors for the latest product specs, pricing, etc.

NEW/CHANGES: This list contains info on updated for several applications: MorseTrainer US-1.0.3; IM/Mac 1.0b27o; NET/Mac 2.3.26 and more information on ftp'able sites carrying Amateur Radio software. Several new items were added at the last moment, more information to follow. Additional e-mail addresses for various authors. Nothing from anyone on the rumor that ZCo Corporation is out of business???

*** Collections ***
MacNet
Public-domain programs (currently on 12 disks) contributed by Macintosh packet users. Includes test preparation, contest logging, propagation prediction, satellite tracking, and amateur television. Send formatted 800K Macintosh disks with stamped, self-addressed disk mailer to John D. Seney, WD1V, 144 Pepperidge Dr., Manchester, NH 03103. Contributions of public-domain programs are encouraged.

Project Mac
Contest logging, antenna design, satellite tracking, clip art, etc.
Microsoft BASIC required for many of the programs. Most of this software is now available in the MacNet collection.
Send three formatted 800K Macintosh disks with stamped, self-addressed disk mailer to Stan Horzepa, WA1LOU, 75 Kreger Drive, Wolcott, CT 06716.
(Compuserve: 70645,247)

Amateur Radio Software for Macintosh
Extensive catalog including logging, Morse code, gray line, test preparation, satellite tracking, contesting, and packet radio programs.
ZCo Corporation, P.O. Box 3720, Nashua, NH 03061. NOTE: This company has

been rumored to be out of business!

Amateur Radio #1
Contains satellite tracking, Morse code, attenuator design, and Ohm's law calculator programs.
Kinetic Designs, P.O. Box 1646, Orange Park, FL 32067.

*** Test preparation ***
Ham Test Stacks
HyperCard stacks containing the entire question pool for each license class. Can be used for preparation or generating actual tests.
The current releases are: Novice v4.1(new questions eff. 7/1/93), Technician v4.0(new questions effective 7/1/93), General v2.4, Advanced v2.4, Extra v2.4
If you wish to receive these PUBLIC DOMAIN stacks, please send a SASE (self addressed STAMPED envelope - 2 ounces postage = .52) and 800K diskette to the author: Diana L. Carlson, 3 Spruce Street, Hudson, NH 03051. Diana will no longer send out the stacks unless the envelope has sufficient postage for return mail (in general, that means .52-.98, depending on size of envelope) and for those who send a standard business envelope, she takes no responsibility for the condition of the diskette through US mail.
Available via anonymous FTP from various sites, including uxc.cso.uiuc.edu (/pub/ham-radio). NOTE: The newest releases of Novice and Technician stacks are available at uxc.cso.uiuc.edu (5/6/93) Author is available via Internet: dls@genrad.com
System 7 savy with HyperCard 2.1

MacHam
Test generators and study aids for the Technician, General, Advanced, and Extra class written elements. Includes the complete question pool for each license. Hypercard based.
Coyne Co., P.O. Box 2000-200, Mission Viejo, CA 92692.
System 7 with HyperCard 2.1

*** Morse code practice ***
N6MZV Morse Trainer
Lets you practice any combination of letters, numbers, and/or punctuation characters. Can send user-created text files.
RT Martin, N6MZV, 10382 Orange Avenue, Cupertino, CA 95014. Also available via anonymous FTP from ftp.apple.com (/pub/ham-radio). Shareware.

Morse Tutor
Sends random groups of letters, numbers, and/or punctuation characters.
Available via anonymous FTP from ftp.apple.com (/pub/ham-radio). Or send formatted 800K Macintosh disk with stamped, self-addressed return disk mailer to Jack Brindle, WA4FIB, 726-175th Street SW, Bothell, WA 98012; Compuserve: 73365,606.

Morse Mania
Designed for those already familiar with Morse code who want to improve their speed. Allows code practice at various speeds and audio pitches. Can generate random sequences or play the contents of user-created text files.
Freeware.

Available via anonymous FTP from whirlwind.stanford.edu (/pub). Contact Edward Plumer, KM6IQ, for more information; Internet: plumer@isl.stanford.edu.

MacMorse
Randomly sends chosen characters. Lets you create your own practice files.
David A. Kall, 700 Marine Parkway #314, New Port Richey, FL 34652.

MacMorse v1.3
MacMorse is designed to help you learn Morse code and improve your receiving speed. It has several ways that it can send letters and punctuation.
Shareware.
Doug Havenhill, Dynamics and Control, 7143 West Sunnyside Drive, Peoria, AZ 85345.

MacSamuel
Sends random words, random character groups, and user-created text files. Can also create simulated QSOs with randomly generated text and callsigns.
Avant Systems, P.O. Box 5437, Pittsburgh, PA 15206.

Zihua Morse
Designed to teach Morse code to beginners and to improve the accuracy and speed of advanced users. Responses can be typed into the computer; the program will calculate accuracy and timing statistics for each session. Optional speech synthesizer reads the characters out loud for an accuracy check.
Zihua, P.O. Box 51601, Pacific Grove, CA 93950.

Sparks-II(f)
More Code training program.
Available for anonymous ftp at rahul.net /pub/davidj/radio

Morse Master 1.0
The newest of the morse code training programs. MM calculates the real speed as follows: Real speed = Number of Words/end time - start time. And the lengh of word is generating randomly, so if you set even 5WPM, sometimes another value will appear. However you should believe the slidebutton's value. If you repeat many times, the average speed should be 5WPM (if not... anyway, believe the slidebutton's value).
Archive is available mac.archive.umich.edu, path: mac/util/organization/morsemaster1.0.sit.hqx
The author can be reached thru the following e-mail addresses: h79261a@kyu-cc.cc.kyushu-u.ac.jp. (Eiji AOL account is no longer valid - moved back to Japan after his studies.)

MorseTrainer US-1.0.3
MorseTrainer is a powerful tool for learning and training Morse code. Features: Three different training modes: user text, random text, library text; Arbitrary signal pitch and timbre; Arbitrary speed and tempo; Multi-alphabet support; Random text generator; Text library editor; On-line alphabet; On-line manual; Help Balloons; And a lot more. FREEWARE!
This version uses TrueType fonts instead on bitmaps fonts so that the user

can distinguish 0(zero) from O(character). Furthermore speed and tempo can be given in either characters/minute or words/minute.
Archive is available mac.archive.umich.edu, path: mac/util/organization/
Author is available via internet: sund@tde.lth.se
System 7 savy

*** Packet and other digital modes ***
NET/Mac 3.2.26
Allows simultaneous TCP/IP, AX.25, and NET/ROM connections. Requires a TNC with KISS mode. Copyright, but free for noncommercial use.
Available via anonymous FTP from ftp.apple.com (/pub/ham-radio); and on the Digikron Systems, WB3FFV, and N8EMR dialup BBSs. Or send a formatted 800K Macintosh disk with stamped, self-addressed disk mailer to Doug Thom, N6OYU, 1405 Graywood Drive, San Jose, CA 95129.
Adam van Gaalen, PA2AGA, (Internet: adam@IGG.TNO.NL) has been making the modifications to NET/Mac. This version (and others) is available via anonymous FTP from ucsd.edu (/hamradio/packet/tcpip/pa2aga), mac.archive.umich.edu and sumex-aim.stanford.edu.
System 7

Domain-to-Hosts Converter 1.0r3
This application will create a hosts.net file from the domain.txt file that PC owners use with NOS. Created by Ken-NS1N is available on many TCP/IP packet switches in New England.program. Version 1.0r3 is the latest release.
System 7

IM/Mac 1.0b27o
Mailer program for use with the SMTP protocol. Alternative to the BM program that comes with NET/Mac. Written by Ivo van Ursel, ON1XK. Ivo is continuosly updating his mailer program. Check for the latest release in the directory before "blind" ftp'ing. (Latest release as of 5/26/93 is 1.0b27k)
Available via anonymous FTP from ucsd.edu (/hamradio/packet/tcpip/pa2aga).
Author is available via internet: on1xk@igg.tno.nl <<-- new address for Ivo
System 7

SoftKiss 1.8
Control panel device that emulates a TNC running in KISS mode. For use with packet-radio modems such as the Baycom kit and PacketMac Modem. Version 1.8 July 9 1993 update since 1.6. KD6PAG found a bug in quoting recieved escape and end characters is sofktiss 1.6. The bug and the fix and patch are all correct, thanks for some great detective work. Lots of doc files and drawings included in this archive!
Available on the HAMNET forum of Compuserve, America Online and via anonymous FTP from akutaktak.andrew.cmu.edu (/aw0g).
System 7

Savant 1.0.1
A new packet terminal front-end by the author of Virtuoso. Savant has a split window interface, but it's also a multi-window, multi-connection interface and will work with almost any TNC, unlike MacRatt or HostMaster.
A demo version of the product is available at cpre1.ee.iastate.edu (pub/ke0ph) or via US Mail, send a SAS disk mailer and disk to KE0PH, 4140

Jay Avenue, Orange City, IA 51041.
System 7

MacRatt with FAX
Terminal program for use with AEA's PK-232 multimode controller. Supports packet, CW, RTTY, AMTOR, and facsimile. Includes cable.
Advanced Electronic Applications, P.O. Box C-2160, Lynnwood, WA 98036.

HostMaster
no info yet (hint, hint)

PacketTracker 1.05
PacketTracker ver 1.05 is a program that monitors packet activity and keeps track of what is going on. It draws a graphical map showing who is talking to who and displays statistics of all current stations and keeps a running tally of activity.
PacketTracker was written for both the casual packet user and the network manager or BBS operator. The casual packet user will be able to learn a great deal about what is happening in packet around him; which stations are generating the most data and what some of them are. he will be able to see graphically what stations he can hitdirectly and which ones he cannot.
For the network manager and BBS operator, PacketTracker provides extensive insight to the operation of the local network and problems such as excessive retries on a path. It also allows for extensive logging of channel utilization and other pertinate information.
NOTE: This application requires the Apple Serial Tool.
System 7

*** RTTY ***
MacTTY
Decodes Baudot or ASCII transmissions. Can also be used for packet radio and other digital modes (including landline data communications). Includes split screen, a 15,000-character type-ahead buffer, and canned messages.
Summit Concepts, Suite 102-190, 1840 41st Ave., Capitola, CA 95010.

WeFaxWorks
Weather facsimile terminal program for use with Kantronics TNCs.
Kantronics rfconcepts, 1202 E. 23rd Street, Lawrence, KS 66046.

*** Logging ***
Ham Radio Station Logbook
HyperCard stack that stores and displays radio contact information. Automatically stamps entries with time and date. Contacts can be sorted by frequency, call sign, or date of contact. Includes report formats, a "Q-code" reference list, and on-line help.
SanSoft, 892 E. Quail Place, Highlands Ranch, CO 80126. (The same program appears to be available from Heizer Software, 1941 Oak Park Blvd., Suite 30, Pleasant Hill, CA 94523.)

FDLog!
Contact logging and duping program. Can transmit any of ten programmable CW messages. Generates real-time statistics on QSO rates.

System One Control, 3900 85th Ave N, Suite 200, Brooklyn Park, MN 55443.

MacContest 3.5
Allows real-time or post-contest logging of a wide variety of contests. Checks for dupes, figures scores instantly, and offers various printouts. Interfaces to TNCs for CW and RTTY contests, to DX packet clusters, to Kenwood transceivers, and to MacinTalk for easy post-contest entry.
Gerald Eberle, HB9CEY, P.O. Box 13, CH-4417 Ziefen, Switzerland.

LOGic
(Macintosh version scheduled.) Lets you define the rules determining dupes (such as once per band or once per contest). Displays heading, distance, and other information about the country being worked. Automatically enters contact time; if interfaced directly to a radio, also enters the frequency, band, and mode. Shows status toward earning amateur-radio awards. User-definable database fields. Exchanges data with other programs.
Personal Database Applications, 2634 Meadow Bend Court, Duluth, GA 30136.

HF Logger 1.2
A real fine HyperCard logging program! (hey... thats all I got!)
N0QGQ

Simple Log .2b
This little utility is a handy way to create a logging file that you can later import into any data base for analysis, etc. It also shows you that just about anyone can use Think C and create something on the Mac! Let me know if you'd like the source code. WD1V @ WA1WOK.NH.USA.NA
Author is John Seney - WD1V, e-mail address is jseney@aol.com. For a copy of this program, mail a SASE disk mailer and 800K disk to: John D. Seney, WD1V, 144 Pepperidge Dr., Manchester, NH 03103
System 7

Marathon
Contesting/logging- Have seen references to (March 92 CQ magazine) and heard good things about MARATHON by N 0 IOS. I believe a demo was available for $8. Last address known is: Kevin Krueger, N0IOS, 1780 Ruth St., St.Paul, MN 55109

*** Propagation, gray line, DX headings ***
DX Map
Displays a map of the world with the terminator. Gives location, prefixes, zone numbers, distance, and heading for any country you select. Freeware. Requires HyperCard 2.0.
Available via anonymous FTP from joker.optics.rochester.edu (in the /ham/dxmap directory). Or send a formatted 800K Macintosh disk with a stamped, self-addressed disk mailer to Len Saaf, NV2Z, 52 Raleigh Street, Rochester, NY 14620 (Internet: saaf@joker.optics.rochester.edu).

SatTrak
Primarily a satellite tracking program, but also calculates beam headings, Maidenhead grid locations, MUF plots, and band openings. Shareware.
Available via anonymous FTP from sumex-aim.stanford.edu (/info-mac/app). Or

send a formatted 800K or 14.MB Macintosh disk with stamped, self-addressed disk mailer to Mike Pflueger, WD8KPZ, 6207 W. Beverly Lane, Glendale, AZ 85306.

Sun Clock
Desk accessory. Displays a color map of the world, including the terminator. Indicates current time for any location.
MLT Software, Inc., P.O. Box 368, Portland, OR 97207.

DX Window
Draws a great-circle world map centered on your QTH, with day/night terminator indicated. Displays over 400 DX locations with prefixes and beam headings.
Engineering Systems, Inc., P.O. Box 939, Vienna, VA 22183.

Skycom 1.1
Enter solar flux and get propagation predictions to desired areas of the world.
Engineering Systems, Inc., P.O. Box 939, Vienna, VA 22183.

Skycom 1.5
Provides sunlight status at both ends of a path; MUF, F0F2, and FOT frequencies; S/N ratio of the link; and other information.
Engineering Systems, Inc., P.O. Box 939, Vienna, VA 22183.

DX Helper
Displays beam heading, distance, gray line, and propagation information. Generates great-circle maps. Identifies prefixes, zones, and oblasts. Includes code practice.
MacTrak Software, P.O. Box 1590, Port Orchard, WA 98336.

Mac MiniMUF
A greyline and propagation predictor based on the PC version of MiniMUF by K4CFV. It is available directly from him for the price of a formatted disk and SASE (disk mailer).
His address in callbook or: Bob Stamper K4CFV, 12510 Shadowrun Blvd., Riverview, FL 33569

Mac Shortwave
A program called Mac Shortwave that figures MUF and LUF.
BXA Research in Plano, Texas

*** Satellite tracking ***
SatTrak
Tracks one satellite across a world map as it moves, displays the instantaneous position of several satellites, or generates tables of all satellites visible from a certain location at a given time. Also calculates beam headings, Maidenhead grid locations, and MUFs. Shareware.
Available via anonymous FTP from sumex-aim.stanford.edu (/info-mac/app). Or send a formatted 800K Macintosh disk with stamped, self-addressed disk mailer to Mike Pflueger, WD8KPZ, 6207 W. Beverly Lane, Glendale, AZ 85306.

MacSat 3.0
Tracks up to 21 satellites simultaneously, either in simulation or real-time mode. Text screen displays ground-track coordinates, range, mean anomaly, visibility (azimuth and elevation) and Doppler shift frequency information for all satellites being tracked. Graphical screen portrays the satellite ground tracks superimposed on a world map. Polar plot displays graphically the precise location of each visible satellite above the observer's horizon. Developed by the Geodetic Research Laboratory of the University of New Brunswick.
Available from Richard B. Langley, R.R. 12, Fredericton, N.B. E3B 6H7, Canada (Internet: lang@unb.ca). A demo version of MacSat may be ftp'ed from directory PUB.CANSPACE on unbmvs1.csd.unb.ca.
System 7

OrbiTrack
Calculates look angles to selected satellites, plots current satellite positions on a world map, and displays the visible passage of a satellite against background stars (either within the program itself or via a data file that can be read into the Voyager astronomy program).
BEK Developers, P.O. Box 47114, St. Petersburg, FL 33743. (Bill Bard, CompuServe: 75366,2557) (Note: This replaces BEK's previous MacSat program, which was not related to the program of the same name from UNB.)

QuikMac
Macintosh version of N4HY's QuikTrak program. Requires Microsoft BASIC.
AMSAT, P.O. Box 27, Washington, DC 20044.

Satellite Orbit Prediction Program
Macintosh conversion of W3IWI program. Requires Microsoft BASIC.
Send formatted 800K Macintosh disk with stamped, self-addressed disk mailer to Earl Skelton, N3ES, 6311 29th Place NW, Washington, DC 20015. Or send self-addressed stamped envelope for source listing.

Satellite Pro
Uses world maps and tables to indicate rising and setting schedules, current locations, mutual visibility opportunities, and footprints. Includes Mercator, polar, and great-circle displays. Optional antenna control.
MacTrak Software, P.O. Box 1590, Port Orchard, WA 98366.

MacSPOC
Author is on AOL and can be reached as adamod@aol.com via the internet.

*** Antenna design ***
MacMiniNEC
Chris Smolinski, N3JLY, 40 South Lake Way, Reisterstown, MD 21136.

*** Radio control ***
ICOM Radio Control
Provides a Macintosh interface for controlling ICOM transceivers that use the CI-V remote-control system. Lets you quickly change frequencies and modes. Also does logging and duping. Requires a CI-V to RS-422 converter (schematic included with program).
KE6FG Software, 9763 Pali Avenue, Tujunga, CA 91042.

FreqValet
Provides frequencies and DX program info for shortwave radio listeners. The program databases update automatically at 15, 30, or 60 minute intervals, thus providing a continuous display of broadcasts on-the-air at any given time in a spreadsheet like format. Features include sorting of data, scanning, and on-screen changing of databases. The program will convert Tom Sundstrom's dBase shorwave broadcast listing to FreqValet format and will do the same for Shorwave Navigator users. Separate cards are provided for DX Programs, Ship to Shore, and Utility broadcasts. Computer control modules are available at extra cost for the Drake R8, Kenwood R-5000, JRC NRD-525, and NRD-535 receivers.
DX Computing, 232 Squaw Creek Road, Willow Park, TX 76087. Telephone (817) 441-9188 or (817) 441-5555 (fax).
Author is available via internet: dxcomp@aol.com
System 7 with HyperCard 2.1

*** Misc ***
Macnet Roster HC Stack v356
This is a HyperCard stack that relates all of the hams known that use Macintosh computers. Contact WD1V for more info. John can be reached via internet as jseney@aol.com
System 7 with HyperCard 2.1

*** Ham radio BBSs ***
Digikron Systems BBS
Various ham-related applications, including logging, propagation, Morse code, and packet. (408) 253-1309.

MacScience BBS
Various ham-related applications, including antenna design, propagation, WEFAX, packet, and Morse code. (408) 866-4933.

N8EMR BBS
Various ham-related files, including packet, DXing, and contesting software; AMSAT bulletins; and several ham newsletters. (614) 895-2553. Also available via FTP on AMPRnet at 44.70.0.1.

WB3FFV BBS
Various ham-related software, including packet, contesting, and Morse code applications. (410) 661-2475, 661-2598, and 661-2648.

ChowdaNet BBS
(more info at a later date)

*** Online Services carrying Ham Radio software ***
America Online/PC-Link
Supports Macintosh, PC's DOS/Windows, PS/1, Apple //s. Ham Radio Club (keyword = ham radio) supports all computer types. Software for amateur radio, scanners, swl'ers and general electronics. For 10 FREE hours of trial time send your snail mail address to tstader@aol.com or call 1-800-827-6364 Ext. 6285. This site NOT ftb'able(yet). Internet e-mail.

CompuServe
Supports any communications software on most computers Ham Radio area (go

hamnet) supports all types of communications formats. Call 1-800-848-8199 for information. This site NOT ftb'able. Internet e-mail.

Delphi
(more info at a later date) Internet e-mail

GEnie
(more info at a later date) Internet e-mail

Prodigy
Has ham radio message areas, no downloadable software. Limited internet e-mail.

==========
Misc. Internet FTP sites for Amateur Radio Macintosh software

joker.optics.rochester.edu (/ham)
sumex-aim.stanford.edu (/info-mac/app)
mac.archive.umich.edu various locations
uxc.cso.uiuc.edu (/pub/ham-radio)
ucsd.edu (/hamradio) many different subdirectories
(/hamradio/incoming) newest files temp holding
area
(/hamradio/packet/tcpip/pa2aga) NET/Mac & IM/Mac
area
ftp.apple.com (/pub/ham-radio)
akutaktak.andrew.cmu.edu (/aw0g) softkiss-mac
nic.switch.ch (/software/mac/ham-radio)
world.std.com (/pub/hamradio/mac)

If you know of any other sites, please e-mail me info so I may keep this list as up to date as possible!

- Terry

Thanks for all of the notes and updates! Keep them coming. Did I get all of the versions right?

==========
NOTE: Much of this work was done by Patty-N6BIS as she collected information from many vendors. I would like to keep this list as up to date as possible. Please feel free to drop me a note if you have any additional software to this list.

DISCLAIMER: The software listed is not endorsed by Apple Computer, Inc.(c) nor has it all been tested by the author/providers of this information.
****
* Recompiled by Terry Stader - KA8SCP (tstader@aol.com) *
* Original list compiled by Patty Winter - N6BIS *
* New information last added 4/93 *
* some information not rechecked since early 1991. *
****

248. Re: Mini group for FBB sysop - Why not?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-09 18:23:18 UTC
From: kb2ear@kb2ear.ampr.org
Message-ID: <1738@kb2ear.ampr.org>
Source record: 51733

Hi all, just wanted to let eveyone know that I have set up a mailing list for FBBS sysops. To get on the list send mail to listserv@kb2ear.ampr.org with this next line as the only line in the message:

ADD fbbs

To post to the list send mail to fbbs@kb2ear.ampr.org.

Hope this helps

73,
--
Scott R. Weis KB2EAR, EMT-A
Inernet: kb2ear@kb2ear.ampr.org
Packet: KB2EAR@KB2EAR.NJ.USA
Snail Mail: 10 Palmer Rd., Kendall Park, NJ, 08824-1228
Phone: +1 908 297 0469

249. 2-m homebrew packet rig?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-09 22:14:27 UTC
From: drenze@icaen.uiowa.edu
Message-ID: <1993Sep9.221427.17808@news.uiowa.edu>
Source record: 51734

I'd like to set up a dedicated radio for packet, but the cost of buying
a 2-m rig (especially the one I'd like!) is prohibitive on my budget right
now. So I was wondering, has anybody homebrewed a 2-m FM rig for use on
packet? Has anybody heard of it being done? If so, please drop me a note!

Tnx es 73 de Doug N0Z??
03W 04D 04H 15M and counting...

--
__ /| | Douglas J Renze | Charter Member, Popular Front
\'o.O' | +1 319 337 4664 | for Revolutionary Darwinism:
=(___)= | drenze@isca.uiowa.edu |
U | Douglas-Renze@uiowa.edu | Evolution Now!

250. Re: Mini group for FBB sysop - Why not?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-09 23:00:27 UTC
From: mcduffie@unlinfo2.unl.edu
Message-ID: <26ocib$6ok@crcnis1.unl.edu>
Source record: 51735

kb2ear@kb2ear.ampr.org (Scott R. Weis KB2EAR) writes:

>Hi all, just wanted to let eveyone know that I have set up a mailing list for FBBS sysops. To get on the list send mail to listserv@kb2ear.ampr.org with this next line as the only line in the message:

>ADD fbbs

>To post to the list send mail to fbbs@kb2ear.ampr.org.

>Hope this helps

>73,
>--
>Scott R. Weis KB2EAR, EMT-A
>Inernet: kb2ear@kb2ear.ampr.org
>Packet: KB2EAR@KB2EAR.NJ.USA
>Snail Mail: 10 Palmer Rd., Kendall Park, NJ, 08824-1228
>Phone: +1 908 297 0469

Okay guys... do we need two? There was already a post saying to subscribe by sending to listserv@stat.com with "sub f6fbb-list" in the text. Why not have only one? Let's not make it complicated. someone decide which one and let's drop the other. Just a suggestion...to keep life simpler.

THANKS for the efforts, all of you. I think this will be of use to many.

Gary

251. 56K baud packet modem

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-09 23:12:07 UTC
From: roliver@nyx.cs.du.edu
Message-ID: <1993Sep9.231207.5299@mnemosyne.cs.du.edu>
Source record: 51736

I would like to find some one on the net who has used the 56K baud
packet modem from WA4DSY and GRAPES.

I would like to find out what kind of throuput they get compared to 14.4K
type 2-wire modem? Also where to get the kits to build these devices?
And the amount of bandwith they require to operate?

I am just looking for the general info on these devices.

thanks,
robby

--
Windows/NT - From the people who brought you EDLIN

252. Re: BPQ for Data Engine Terminal Settings

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-09 23:39:45 UTC
From: WG0B@delphi.COM
Message-ID: <01H2R8BYJCMQ91VYUO@delphi.com>
Source record: 51737

From: -Steve Schallehn KB0AGD Date: 6 Sep 93 21:28:59 GMT

>some time now, but as of yet has not figured out the best terminal

>settings for the DataEngine's serial port. I have tried 9600 bps, -
8

>data bits, 1 stop bit, no parity, half-duplex, with translate CR to

>CR/LF, but it still does not work well.

Steve:

If memory serves, the serial port is run as a KISS or NetRom Serial

(NRS) protocol interface when the BPQ node firmware is in control. -
This

allows the node to communicate with another TNC which is either in

KISS mode or has a Netrom (compatible) program installed. There is -
also

multidrop kiss, but that is another issue. What I believe is NOT

supported is standard ASCII i/o on the serial port which is probably-
what

you are looking for. I am assuming you are talking about running wi-
th

the AUX switch depressed so that the data engine is using the BPQ no-
de

program.

The workaround is to use a terminal program which communicates in th-
e

appropriate mode over its serial port (KISS or NRS). I use this app-
roach

in my test configuration for JNOS40, and it works just fine. Your

terminal becomes another TNC to the BPQ node. Terminal programs whi-
ch

will serve this purpose are any NOS variant or the BPQ node software-
for

the PC.

Drop me a direct line (wg0b@delphi.com) so I can get a good address

for you. I have some other things I want to discuss with you.

That's it for now.

73,

Doug Thompson, WG0B

==========

Packet: wg0b@k0hyd.#scks.ks.usa.noam

tcp/ip: wg0b.ampr.org (44.122.0.8)

Internet: wg0b@delphi.com

Telconet: (316) 688-0004

STUFF: Junk we keep..... JUNK: Stuff we throw away

==========

253. Re: Internet <--> Packet-Radio (help pls)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-10 05:04:20 UTC
From: david@stat.com
Message-ID: <XLaN0B16w165w@stat.com>
Source record: 51739

jangus@skyld.tele.com (Jeffrey D. Angus) writes:

> In article <cJki0B4w165w@stat.com> david@stat.com writes:
>
> > How to Use the WB7TPY
> > Packet <-> Internet Gateway
>
> What are you using for this? MS-DOS or Unix operating system. Intel x86
> hardware or something else. (Probably Unix) How many tasks are running to
> support the gateway. How much of the code/executable are available?

I am running a 486/66 machine (not necessary but that is what I have),
with waffle 1.65 in one window under Desqview, JNOS in another window,
and custom software to port the messages between the two.

david

Internet: david@stat.com FAX: +1 (602) 451-6135
Bitnet: ATW1H@ASUACAD FidoNet=> 1:114/15
Amateur Packet ax25: wb7tpy@wb7tpy.az.usa.na

254. (none)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-10 07:07:57 UTC
From: kneip@scoop.ims.uni-hannover.DE
Message-ID: <9309100707.AA14936@scoop.ims.uni-hannover.de>
Source record: 51738

There have been several requests for a BayCom-driver for
MS-Windows and a modem at the RS-232.
The usual L2-driver supplied with the BayCom package does
not operate under MS-Windows. The reason for this are the very frequent
and time-critical accesses to the 8250-chip in the RS-232. They
are necessary to provide synchronous data operation with this
equipment and for the software implementation of a digital PLL for
clock regeneration. The multitasking system under MS-Windows does
not react fast enough and not under real-time conditions to get
this working.
A solution for that would be the programming of a device driver
for MS-Windows. But this seems very difficult to us even for an experienced
programmer...
We have not started such a project yet, but perhaps there is someone
out there with some more experience with this kind of applications.

Nevertheless: With a BayCom USCC slotcard the L2 driver will run under
windows, if you have started it before starting windows. SCC.EXE then
can be run as a DOS application window.

73s from the BayCom-team

Johannes, DG3RBU

255. Amiga NOS,TCP/IP,BBS software [Followup]

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-10 11:44:56 UTC
From: lanzo@tekelec.com
Message-ID: <1993Sep10.114456.21304@gecko.uucp>
Source record: 51541

A little over a week ago I asked:

> Does anyone know if there is any software available for the
> Amiga (under AmigaDOS not Unix) which will allow me to set
> up a full featured BBS and e-mail system with TCP/IP support?
>
> Currently I am running AmigaNOS, which is good as an e-mail
> system .... [much stuff deleted from this point on]

And also added:

> ... I will summarize my findings if there is sufficient interest.

I received several responses, including some desiring to know what
I found out, so I am posting a quick followup here.

Unfortunately, I didn't receive anything which actually provided
a direct answer to my question, from which I infer that there
really isn't anything around besides AmigaNOS for the Amiga, so
I guess that the bottom line is simply that I am out of luck.

I did receive one reply suggesting that I take a look at AmiTCP;
which is apparently an implementation of TCP/IP protocols for the
Amiga. This might be useful and I will try to look into it;
however, I doubt that it will have too much applicability in the
packet radio area, since what I am really looking for is a
full-featured BBS and e-mail system with support for IP, NET/ROM,
(and of course raw AX.25) for packet radio use, and not generic
networking software per se. The blurb I got did mention that the
AmiTCP came with some applications though, so I'm not sure what it
provides right now.

Oh well, not much information here ... but I did promise a summary :-)
Thanks to all those who replied.

73! -Mark-

+---+------- /// -----+
| Mark Lanzo KD4QLZ lanzo@tekelec.com 919-460-5576 | \\\/// |
+---+---- \XX/ -------+

256. Re: Mini group for FBB sysop - Why not?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-10 16:48:42 UTC
From: dan@aznet.stat.com
Message-ID: <VF5N0B2w165w@aznet.stat.com>
Source record: 51542

mcduffie@unlinfo2.unl.edu (Gary McDuffie Sr) writes:

> kb2ear@kb2ear.ampr.org (Scott R. Weis KB2EAR) writes:
>
>
> >Hi all, just wanted to let eveyone know that I have set up a mailing list fo
>
> >ADD fbbs
>
> >To post to the list send mail to fbbs@kb2ear.ampr.org.
>
> >Hope this helps
>
> >73,
> >--
> >Scott R. Weis KB2EAR, EMT-A
> >Inernet: kb2ear@kb2ear.ampr.org
> >Packet: KB2EAR@KB2EAR.NJ.USA
> >Snail Mail: 10 Palmer Rd., Kendall Park, NJ, 08824-1228
> >Phone: +1 908 297 0469
>
>
> Okay guys... do we need two? There was already a post saying to
> subscribe by sending to listserv@stat.com with "sub f6fbb-list" in the
> text. Why not have only one? Let's not make it complicated. someone
> decide which one and let's drop the other. Just a suggestion...to keep
> life simpler.
>
> THANKS for the efforts, all of you. I think this will be of use to
> many.
>
> Gary

Hi...WE have had the "listserv@stat.com" active for the past 3 days now
and 2 postings...The first was when we started it, and the formal was sent
out lastnight.

Best 73's to all de Dan N7MRP
Sysop for
listserv@stat.com
f6fbb-list

Internet: dan@aznet.stat.com
Ax.25: n7mrp@n7mrp.az.usa.na

Voice: (602) 956-2566

257. JNOS and 16550AFN's

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-10 18:12:12 UTC
From: mead@hamal.usc.edu
Message-ID: <26qg1s$61q@hamal.usc.edu>
Source record: 51545

I currently run JNOS 110x9 on a 386/33 clone with a serial card using
8250's. I run under QEMM/Desqview, with a bbs running in another window.
This all runs fine. I can see no significant problems with someone
on the bbs at 9600, doing a zmodem xfer, while I am in NOS doing
a 9600 xfer to another local 9600 station. Trace mode shows expected
packets decoded and properly displayed. I get a few timeouts in the
asystat display.
Now, I figure replacing the 8250's with 16550AFN's should only improve
matters, right? JNOS knows about them, right? So I install them and
I can't connect any longer in JNOS. Trace is all garbage. The asystat
display does not appear bad, just now shows I have 16550's. I did not
alter any autoexec.nos settings. Should I have? What am I missing?
I went back to 8250's. I know...if it works, don't fix it.
Is there a magic flow control param I missed? I run an MFJ 1270B
with this (g3ruh modem in it). Remember, all works fine with the
slow, old, ugly 8250's. Thanks for any enlightenment.
Dick WB6NGC

mead@usc.edu

258. Baycom under multitask system

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-10 18:38:30 UTC
From: William=E.=Newkirk%Pubs%GenAv.Mlb@hwking.cca.CR.rockwell.COM
Message-ID: <9309101842.AA01769@ucsd.edu>
Source record: 51543

>There have been several requests for a BayCom-driver for
>MS-Windows and a modem at the RS-232.
...
>Johannes, DG3RBU

sounds like it may be a candidate for IBM OS/2 rather than MS-Windows. would bet it would work under a VMB if not a VDM....your choice of MS DOS to run...

bill wb9ivr (who has a "real" tnc and hasn't gotten into this software TNC stuff --- caveat emptor and all that)

259. HAM-server help file

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-10 18:39:25 UTC
From: HAMSinfo@GRAFex.Cupertino.CA.US
Message-ID: <gate.747686365@GRAFex.Cupertino.CA.US>
Source record: 51544
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc

All you might ever want to know about the KA6ETB HAM-server

Hardware:
========

386/25 PC clone
Telebit QBlazer modem
20-Meg file space reserverd for archive

Software:
========

Waffle 1.65
WFSmail 2.03

General Information:
===================

Orders for files are filled between the hours of 0200-0400 daily. This is so those hosts through which the traffic is forwarded are not overloaded. Since we all depend on the generosity of others to carry the mail, it behooves us not to make them angry.

ASCII (text) files are split at about 30,000 bytes or 700 lines (which ever comes first). UUENCODED binary files are split at about 750 lines.

If you are using a PC and you do not have UUDECODE, follow these steps:

1. Order UUDECODE.BAS or UUDECODE.C, and UUEXE515.ZIP.
2. Compile UUDECODE.BAS or UUDECODE.C on your system.
3. Use the resulting executable to UUDECODE UUEXE515.ZIP. UUEXE515 has documentation about UUENCODE/UUDECODE.

You are all set to start ordering binary files from HAM-server.

/hamradio/newfiles/ contains files that have not yet been categorized. You can order a list of newfiles by sending the following in an email.

NEWFILES <date>

<date> is in the form of MM-DD-YY, and is required.

If you order a file and do not get it, check the index to be sure you have spelled the filename correctly. If you have ordered the file correctly, then order a new INDEX, as I may have moved the file to a different directory. The system is still expanding, and I am trying to keep it in managable chunks.

Also, if you have ordered files from HAM-server and do not receive them, it might be because your return path is incorrect. My bounce mailbox fills up quite regularly with bounce messages. And, since the path is incorrect, I cannot contact you to let you know.

Orders must be sent to HAM-server. Orders sent to KA6ETB or HAMSinfo are ignored.

A new INDEX is automatically generated every Sunday and when files are moved or added.

Message Command Language:
==========

There are some general rules for ordering files:

o Commands and operands are not case sensitive.

o Leading spaces are permitted before the command. Commands must be the first token on a line.

o A '#' character as the first character on a line is treated as a comment. The line does not cause an error.

o A line beginning with the string "--" is treated as end of input. The remainder of the message is ignored.

The commands are:

GET
HELP
INDEX
NEWFILES
PING
QUIT

The GET Command:

The GET command sends the requested file. The syntax for the GET command is:

GET <filespec> [uue[ncode] | xxe[ncode]]

<filespec> is required. <filespec> must specify a path, but without a drive specification. The filespec is not relative to any directory.

uuencode or xxencode is optional and may be abreviated as "uue" or "xxe", respectively. If neither are specified, the file is sent according to the file extension. Files with these extensions will be sent encoded:

com exe zip pak arc arj gif lzh lha zoo z tar

If uuencode is specified, the file is sent uuencoded.

If xxencode is specified, the file is sent xxencoded.

For example:

GET /hamradio/00-index.txt
GET /hamradio/utility/uuexe515.zip uue

are syntactically correct.

The HELP Command:

The HELP command gets this file.

The INDEX Command:

The INDEX command sends an index of files available from HAM-SERVER.

Use

GET 00-INDEX.TXT

to get a description of the files.

The NEWFILES Command:

The NEWFILES command sends a list of files newer that the user
specified date.

The systax for the NEWFILES command is:

NEWFILES <date>

<date> is required. <date> has the form of mm-dd-yy. HAM-SERVER is
strict about checking the form of <date>; if it does not look like
it expects, the command will be rejected.

A valid specification for the NEWFILES command is:

NEWFILES 02-15-92

The PING Command:

The PING command causes HAM-SERVER make a simple reply, via the
session transcript, to the requestor. To test the path to HAM-SERVER,
send the PING command.

The QUIT Command:

The word "quit" as the first token on a line causes HAM-SERVER to
quit processing input as if end of input had occurred.

260. WANTED: Comments on Baycom BP-1 TNC

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-10 18:52:52 UTC
From: sehrlich@lynx.dac.northeastern.edu
Message-ID: <1993Sep10.185252.12052@lynx.dac.northeastern.edu>
Source record: 51546

```
Newsgroups: rec.radio.amateur.digital.misc
Subject: WANTED: Comments on Baypac BP-1 TNC
Summary:
Followup-To:
Distribution: usa
Organization: Northeastern University, Boston, MA. 02115, USA
Keywords:

As the subject says, I'd like feedback and comments from anyone who has
any information on the above mentioned TNC (Tigertronics, Inc Baypack
BP-1 TNC). From the picture in their ad, it looks to be the smallest,
self-contained TNC I've ever seen, and, if the net votes favorably (I
WILL post a summary, I promise), it will work very nicely with my HP48SX
calculator (the calc with built-in Kermit), and my HT. And the TNC is
only ~$50.

Thanks much in advance.

==============================================================================
| Scott Ehrlich Internet: acm_se@neu.edu |
| Amateur Radio: wy1z AX.25: wy1z@wg1i.#ema.ma.usa.na |
|------------------------------------------------------------------------------|
| Know your weaknesses, show your strengths - Anonymous |
==============================================================================
--
==============================================================================
| Scott Ehrlich Internet: acm_se@neu.edu |
| Amateur Radio: wy1z AX.25: wy1z@wg1i.#ema.ma.usa.na |
|------------------------------------------------------------------------------|
```

261. Re: WANTED: Comments on Baycom BP-1 TNC

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-10 21:09:54 UTC
From: "F. Kevin Feeney" <fkf1@cornell.edu>
Message-ID: <26qqf2INNe6a@newsstand.cit.cornell.edu>
Source record: 51547

In article <1993Sep10.185252.12052@lynx.dac.northeastern.edu> ,
sehrlich@lynx.dac.northeastern.edu writes:
>As the subject says, I'd like feedback and comments from anyone who has
>any information on the above mentioned TNC (Tigertronics, Inc Baypack
>BP-1 TNC). From the picture in their ad, it looks to be the smallest,
>self-contained TNC I've ever seen, and, if the net votes favorably (I
>WILL post a summary, I promise), it will work very nicely with my HP48SX
>calculator (the calc with built-in Kermit), and my HT. And the TNC is
>only ~$50.
>
>Thanks much in advance.

The baypac is only a modem, the TNC is a piece of shareware that
runs on a dos machine. I don't think the HP48SX can
execute it (I don't know the 48, but if it's not a dos machine
I think you are out of luck)

Swap the 48 for a small laptop and you are all set.

73 de Kevin, WB2EMS
(fkf1@cornell.edu)

262. Southend & District Radio Society Clubnews

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-10 23:24:23 UTC
From: g1xgp@g1xgp.demon.co.uk
Message-ID: <747731617snx@g1xgp.demon.co.uk>
Source record: 51582

```
SOUTHEND & DISTRICT RADIO SOCIETY CLUBNEWS.

Forthcoming Events:-

14/09/93 Committee Meeting at Rocheway 20:15
17/09/93 Quiz Night.
19/09/93 EPG/KEPAC Junk/Boot Sale at Rocheway (10:00am - 15:00).
01/10/93 Talk by Bob of Waters & Stanton.
10/12/93 Talk on Essex Villages.

Special Event Stations that the Club will be participating in:-

CLUB MAILING ADDRESS:-

P.O. Box 88, Rayleigh, Essex SS6 8NZ.

(Letters only please - No parcels).

Steve..G1XGP @ GB7DUG
"SOUTHEND & DISTRICT RADIO SOCIETY"

## End of File ##
/ex

--------------------------------------------------------------------
+ Steve Blinkhorn + G1XGP @ GB7DUG.#32.GBR.EU (Amateur Radio) +
+ AMPRnet + g1xgp@g1xgp.ampr.org [44.131.16.147] +
+ Essex Packet Group + g1xgp@g1xgp.demon.co.uk (Internet) +
--------------------------------------------------------------------
```

263. Re: Amiga NOS,TCP/IP,BBS software [Followup]

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-11 02:48:11 UTC
From: n4tii@kd4nc.uucp
Message-ID: <1993Sep11.024811.2484@kd4nc.uucp>
Source record: 51548

lanzo@tekelec.com (Mark Lanzo) writes:

>A little over a week ago I asked:

> > Does anyone know if there is any software available for the
> > Amiga (under AmigaDOS not Unix) which will allow me to set
> > up a full featured BBS and e-mail system with TCP/IP support?
> >
> > Currently I am running AmigaNOS, which is good as an e-mail
> > system .... [much stuff deleted from this point on]

>And also added:

> > ... I will summarize my findings if there is sufficient interest.

>I received several responses, including some desiring to know what
>I found out, so I am posting a quick followup here.

>Unfortunately, I didn't receive anything which actually provided
>a direct answer to my question, from which I infer that there
>really isn't anything around besides AmigaNOS for the Amiga, so
>I guess that the bottom line is simply that I am out of luck.

>I did receive one reply suggesting that I take a look at AmiTCP;
>which is apparently an implementation of TCP/IP protocols for the
>Amiga. This might be useful and I will try to look into it;
>however, I doubt that it will have too much applicability in the
>packet radio area, since what I am really looking for is a
>full-featured BBS and e-mail system with support for IP, NET/ROM,
>(and of course raw AX.25) for packet radio use, and not generic
>networking software per se. The blurb I got did mention that the
>AmiTCP came with some applications though, so I'm not sure what it
>provides right now.

>Oh well, not much information here ... but I did promise a summary :-)
>Thanks to all those who replied.

>73! -Mark-

You do know that there is a CBBS program floating around out there in
netland. I got an OLD version off a Fred Fish disk (FF241 I think).

I don't know how well the new versions are, and if they support some kind
of Netrom or BPQ type node software.... but that is another thing of
interest. BTW, I never could get my version of Amiga NOS to work...all
I have is code...and when trying to compile, it always failed....so I
just stuck to good ole AX-25.

73 de John, n4tii

n4tii%kd4nc.uucp@gatech.edu

```
>+-------------------------------------------------------+------- /// -----+
>| Mark Lanzo KD4QLZ lanzo@tekelec.com 919-460-5576 | \\\/// |
>+-------------------------------------------------------+---- \XX/ -------+
```

264. Re: Packet on a Unix box?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-11 14:45:14 UTC
From: jdc@cci.com
Message-ID: <CD72BE.6KH@sunsrvr6.cci.com>
Source record: 51551

In article <930906.204449.6G2.rusnews.w165w@mulvey.com>,
Rich Mulvey <rich@mulvey.com> wrote:
>drenze@icaen.uiowa.edu (Douglas J Renze) writes:
>
>> Has anybody out there successfully run packet (specifically: TCP/IP) on a
>> Unix box? Can the standard TCP/IP package be used, or must a Unix version
>> of the KA9Q TCP/IP package be used and does such a beast exist?
>>
> Yup, you can. Look for WAMPES on Archie - I know that it has been ported
>to Linux, and probably most other Unices, as well.
>
>- Rich
>
>--
>Rich Mulvey Amateur Radio: N2VDS 787 Elmwood Terrace
>rich@mulvey.com Rochester, NY 14620

How about Unix software for Baycom modems?

73...Jim
N2VNO

265. SCDX 2184

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-12 02:06:51 UTC
From: p00489@psilink.com
Message-ID: <$scdx.2184@ampr.org>
Source record: 51559
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.info

Because SCDX 2184 was not put out on the net... this is being sent.
Please note that this is an "old" post and not a new issue! I cannot
seem to find 2185 at the moment... but I'll continue to look.

```
::::::::::::::::::::::::::::::::::
:: MediaScan ::
:: SWEDEN CALLING DXERS ::
:: from Radio Sweden ::
:: Number 2184--August 3, 1993 ::
::::::::::::::::::::::::::::::::::
```

Satellite, shortwave and other electronic media news from Radio Sweden.

This week's bulletin was written by George Wood.

Packet Radio BID SCDX2184

All times UTC unless otherwise noted.

NORDIC MEDIA NEWS:

TV 5 NORDIC--Satellite broadcasting has become profitable here in
Scandinavia. All three Swedish commercial satellite broadcasters, TV3, TV4,
and TV5 Nordic, are now showing profits. For TV5, this is a considerable
change. Just two years ago the former owner had to sell three-quarters of the
channel to a Luxembourg-based American company.

We called TV5 Nordic's Managing Director, Hans von Schreeb. What have you
done to turn things around?

HANS VON SCHREEB: Mainly knowledge. During at least the latter part of the
80's you could raise money in Sweden for ventures such as TV. But there was
no previous knowledge of commercial television. So through a new major
ownership we have gained knowledge in the sense that we have the U.S.
experience and also experience from Denmark and Norway. That's the experience
that we are now taking advantage of.

RADIO SWEDEN: It seems like you're always the little brother of Swedish
broadcasters. The newspapers and magazines usually put you on a separate page
from the other 4 channels, or they put you into a little box with the foreign
channels. Does that hurt?

HVS: Well, it hurts mentally, in the sense that fro the beginning we were not
even in the papers. While our competitors, for example TV4, was in the papers
even before they began broadcasting. Now in our case, we are getting our

decent share, even in the papers. So, I think that
within the forthcoming months you will see the necessary changes. But already now we have an average of about 60 or 70 percent of the viewers that TV3 has, and this means that we should be in the papers in the same way as our competitors. I think you will see that change.

RS: So they're taking you more seriously now?

HVS: Well, yess. We have at least, on the average, between 500,000 and 700,000 viewers who watch us every night, and they should have a proper chance to gt decent information.

RS: The American company that owns you also owns Norway's TV Norge and Denmark's TV2. Has this helped you--are you co-ordinating any programming or anything like that?

HVS: We will. It also helps us with experience, what kind of format works, how can you make local productions in a Scandinavian environment, how can you cut costs, etc. This also gives us an opportunity to choose computer systems that are already used in Denmark and Norway. Yes this helps.

RS: You've had a fight with France's TV5 over the very name itself. Have you finally resolved that problem?

HVS: The Swedish Supreme Court has ruled that we have the right to use the name TV5 Nordic until the case is finally resolved. Hopefully it will be resolved, and I would really like to settle outside of court, because I don't think we gain anything from this fight. The name TV5 is used in various places in Europe. We're also two very different stations, in two different languages. One is a government-owned public service channel, the other is an internationally-owned commercial TV service. I don't think we have hurt the French in any deep way. So I don't think this fight is especially rational.

RS: What about future plans? You have a lot of American programming, is that going to continue?

HVS: Well yes, it will continue at the same level as long as our viewers like it. I think the main thing is to get more local production, to give a Swedish flavor to it. And that's what we're aiming for now. We've gone through our graphic program, which is totally different from TV3 and TV4, and you'll also see local production that's different.

RS: One thing that you don't have is news.

HVS: We will have news in one form or another. Our news will give an opportunity for our viewers to be informed while watching TV5 Nordic during the evening. So it will be short news stories. You'll see that rather soon.

EUROPEAN MEDIA NEWS:

ASTRA--Right on time on July 22nd, Discovery and its companion, the oldies TV and film channel Bravo, showed up on the new Astra 1C satellite.

Discovery is on Astra transponder 41, Bravo on 42. Both are soft-scrambling in videocrypt, which means anyone with a decoder can watch, without a smart card. That's just as well, since the cards for the Sky Multi-Channel package, which is to include Discovery and Bravo, go into effect on September 1st.

BSkyB has extended the discount offer for its Multi-Channels package until August 31st, the date before the new package goes into effect. This could indicate that they haven't received as many subscriptions as they had hoped. On the other hand, BSkyB may have intended to have August 31st as the final date the entire time, and the original July 31st target may have been a marketing ploy to encourage early subscriptions.

When the Children's Channel signs off transponder 35, there's now a sign from Astra saying the Family Channel will be using that transponder, which confirms our report of two weeks ago.

On August 1st Bravo switched to a new schedule between noon and midnight British time, so there's room for the Adult Channel to make its reported move from transponder 26. But that hasn't happened yet.

There's also some very interesting speculation in "Sky Guide". Right now TV Asia is using the Nickolodeon transponder, number 46, between 18:00 and 06:00 hrs UTC. But they'll have to move when the Nick at Nite service starts there. When the Adult Channel moves from transponder 26, and British Sky Broadcasting starts its multi-channel package, BSkyB might also close Sky Movies Gold on that transponder. That would allow TV Asia to expand its operation on transponder 26 to 24 hours a day. ("Sky Guide")

Otherwise, the big news from Astra is that the company has now decided to launch a sixth satellite, Astra 1F, scheduled to go into orbit in 1996. Like Astra 1E, due for launch in early 1995, 1F will be dedicated to digital radio and television. 1E will operate in the 11.7 to 12.1 GHz range, while 1F will cover between 12.1 and 12.5 GHz. (SES)

VIRGIN--Virgin 1215 made its return to Astra July 23rd at 09:00 hrs UTC. They're using 7.38 and 7.56 MHz on the Sky News transponder. So far both channels are mono, but the service will be stereo soon. The country music station QCMR, which had been on one of those channels, has moved to the Sky Sports transponder, 7.38 MHz. (James Robinson)

WORLD RADIO NETWORK--The long-awaited relay from the World Radio Network of National Public Radio from the United States began on July 20th. "Morning Edition" is being carried for an hour at 13:00 hrs UTC, and there's two hours of "All Things Considered" at 21:30 hrs. But the service is not on Astra. They're using the World Radio Network's Eutelsat II-F1 outlet, on the MBC transponder, 11.554 GHz, audio 7.74 MHz. We called up Karl Miosga at the World Radio Network and asked why?

KARL MIOSGA: We're using this as a test transmission, a temporary service, to check out the circuit from Washington to London and iron out any little bugs that we may have. But also for prospecgive radio stations and cable companies who might be interested in relaying live programs from NPR.

RADIO SWEDEN: So when will you be going to Astra?

KM: We're aiming to start our Astra service in September, with test transmissions beginning one or two weeks before, middle of August say. At the moment, Astra 1C looks very likely as to where our home would be, but at this point we can't make a definative announcement.

RS: Right now the NPR programming is sharing your channel with your regular programming from Vatican Radio in many languages and Radio Canada International in Russian. When you move to Astra, it will be a completely new channel. Are you lining up other English language broadcasters as well?

KM: Yes. It will be a mixed bag again, but all in English, of course. And mostly live. We'll have a couple of surprises, I can't give you any exact details at this point, but it will be very similar to the tests we did last year.

RS: Right now you have the two programs from NPR, "Morning Edition" and "All Things Considered". Are you planning on having other programs from National Public Radio as well?

KM: That is correct. We'll be taking "Talk of the Nation", which is their live telephone radio show, which happens in the evening our time. And it will also be possible for anyone across Europe to take part in that. But that will be one of the extra programs that will feature in the Astra line-up.

ARIANE--Ariane has had another launch after Astra 1C. On July 22nd the Western European rocket put satellites for Spain and India into orbit.

Spain's Hispasat 1B is the follow-up to Hispasat 1A, and will be placed alongside it at 30 degrees West. It should be in place in about 10 days, and will begin official operation in October. Hispasat transmits to both Spain and Latin America, with both Ku-band DBS and Fixed Satellite Service transponders. But there have been problems with the 1A satellite. 1B should make a big difference.

The other satellite just launched into orbit is India's Insat 2B. It's India's second indigenously-built satellite, and will be placed at 93.5 degrees East. It's expected to be declared operational by early September. It will complement Insat 2A, which is at 74 degrees East. (Reuters, "World Satellite Almanac")

India's state-owned television is to launch four satellite-based channels on August 15th, India's Independence Day, to win back audience from foreign networks. The new channels will carry sports, entertainment, news, and music programming, apparently from Insat 2A. A fifth channel is to begin on Insat 2B. (BBC Monitoring)

ASIAN MEDIA NEWS:

SKY AND STAR--Europe's biggest satellite broadcaster has bought a controlling interest in Asia's biggest satellite broadcaster. Rupert Murdoch's News Corporation has purchased 63.6 percent of Hong Kong's Star Televison, which currently transmits 6 channels: news from BBC World Service Television, sports, general entertainment, and channels in Mandarin and Hindi.

News Corporation owns British Sky Broadcasting, which has 6 channels on Astra, and is behind the new Astra multi-channel package. News Corporation also owns Fox Television and 20th Century Films in the United States.

Less than a month ago Murdoch was thwarted in his effort to buy 22 percent of Hong Kong's TVB, which has a vast library of Chinese programming, in an effort to create a competitor to Star Television. That deal got stopped by the Hong Kong government, and TVB has since lined up with CNN, Home Box Office, ESPN, and the Australian Broadcasting Corporation. But they'll be broadcasting on Indonesia's Palapa B2P satellite, whose signal barely reaches the main Chinese-language markets of China, Hong Kong, and Taiwan.

Star, on the other hand, reaches 11 million homes from Japan to the Middle East on Asiasat-1. Asiasat-2, with more channels, is due to be launched next year. Star is expecting that BSkyB's expertise will help it launch several pay-TV channels in October. The deal follows an attempt by Pearson, owners of the "Financial Times" to buy control of Star-TV. Analysts have described the merger of Sky and Star as a marriage made in heaven. (AP, Reuters, "International Herald Tribune", "The Economist")

BUSINESS NEWS CHANNEL--Japan's Mitsui company has reached agreement with NBC in the United States and Pearson plc, owner of the "Financial Times", to launch a 24 hour financial and business satellite channel for Asia. Star-TV is also involved, so presumeably the new channel would broadcast from Asiasat-1. (Kyodo News Agency via BBC Monitoring)

SHORTWAVE:

ALBANIA--Radio Tirana is restructuring, cutting back from 23 languages, to first 12 and then 8 services. Radio Tirana is now broadcasting in English: 01:30-02:00 hrs and 02:30-02:45 hrs on 9580 and 11840 kHz; 14:30-15:00 hrs on 7155 and 9760 kHz; and 22:00-22:15 hrs on 1395; 9760, and 11815 kHz. (BBC Monitoring)

LIBERIA--The pro-Nigerian-ECOMOG Radio ELBC in Monrovia continues to broadcast on 7275 kHz, despite reports that it went off the air in May. The pro-Charles Taylor Radio ELBC based in Gbarnga also continues to broadcast. (BBC Monitoring)

LITHUANIA--Radiocentras, the private station in Lithuania, has been testing in slow-speed morse code on 9400 kHz. BBC Monitoring says they are announcing an output power of 5 kW, and it certainly has a strong signal here in Stockholm. The part we recorded was in English, and gave the address for reception reports.

SOMALIA--A new station broadcasting in Somali and calling itself Radio Mogadishu has been heard at 15:00 hrs on 6870 kHz. This station supports General Mohammed Farah Aydid and opposes the United Nations presence in Somalia. It uses the same signature tune as used by Ali Mahdi Muhammad's Radio Mogadishu, which has been heard on 6863 and 6866 kHz. (BBC Monitoring)

UNOFFICIAL RADIO--The Voice of Independent Kurdistan, which supports the Kurdish Workers Party, the PKK, has been heard at 14:00 hrs on 7330 kHz. It was last heard in March on 7030 kHz. (BBC Monitoring) The PKK is fighting for

a Turkish homeland in Turkey, and has recently attacked tourist targets in Turkey.

Sweden Calling DXers is the world's oldest radio program for shortwave listeners. Radio Sweden has presented this round-up of radio news, features, and interviews on Tuesdays since 1948.

Radio Sweden broadcasts in English:

Europe and Africa:

15:00 hrs on 1179 khz (weekdays only)
16:15 hrs on 1179 and 6065 kHz
17:30 hrs on 1179, 6065, and 9645 kHz
20:30 hrs on 1179, 6065 and 9655 kHz
21:30 hrs on 1179 and 6065 khz, and
22:30 hrs on 1179 and 6065 kHz

Middle East and East Africa:

15:00 hrs on 15190 kHz and
17:30 hrs on 15270 kHz

Asia and the Pacific:

12:30 hrs on 15240 and 21500 kHz
22:30 hrs on 11910 kHz and
01:00 hrs on 9695 and 11820 kHz

North America:

15:00 hrs on 15240 and 21500 kHz and
02:00 hrs on 9695 and 11705 kHz

South America:

00:00 hrs on 9695 kHz

The broadcasts at 12:30, 16:15, 17:30, 20:30 (weekends only), 21:30, and 22:30 hrs are also relayed to Europe by satellite:

Astra 1B (19.2 degrees East) transponder 26 (Sky Movies Gold/TV Asia/Adult Channel) at 11.597 GHz, audio subcarrier at 7.74 MHz,

Tele-X (5 degrees East) (TV4 transponder) at 12.207 GHz, audio subcarrier 7.38 MHz.

Contributions can be sent to DX Editor George Wood by fax to +1-707-468-1460 (beginning August 13), from Internet to 70247.3516@compuserve.com, or from MCI Mail or CompuServe to the CompuServe mailbox 70247,3516.

Reports can also be sent to:

Radio Sweden
S-105 10 Stockholm
Sweden

Contributions should be NEWS about electronic media--from shortwave to satellites--and not loggings of information already available from sources such as the "World Radio TV Handbook". Clubs and DX publications may reprint material as long as MediaScan/Sweden Calling DXers and the original contributor are acknowledged, with the exception of items from BBC Monitoring, which are copyright.

We welcome comments and suggestions about the electronic edition, Sweden Calling DXers, and our programs in general.

Thanks to this week's contributors Good Listening!

Terry M. Stader, KA8SCP, America Online (AOL) Ham Radio Club Host
Macintosh Amateur Radio Software List Maintainer
Internet: tstader@aol.com or p00489@psilink.com
Packet: KA8SCP@WA1PHY.#EMA.MA.USA.NOAM

266. Re: 2-m homebrew packet rig?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-12 13:42:30 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1993Sep12.134230.19253@ke4zv.atl.ga.us>
Source record: 51553

In article <1993Sep9.221427.17808@news.uiowa.edu> drenze@icaen.uiowa.edu (Douglas J Renze) writes:
>I'd like to set up a dedicated radio for packet, but the cost of buying
>a 2-m rig (especially the one I'd like!) is prohibitive on my budget right
>now. So I was wondering, has anybody homebrewed a 2-m FM rig for use on
>packet? Has anybody heard of it being done? If so, please drop me a note!

Sure you can do it. You can find designs in the ARRL Handbook. But it's
almost always not cost effective. You can find used Micors and Exec IIs
at hamfests in the $50-$90 range all day long. You can't build a radio
of this quality for that amount of money. Finding the parts alone is an
exercise in futility. These radios use very good filters and inductors
made especially for Motorola and GE. They aren't commodity items.

Converting surplus is usually trivial for 1200 baud applications. That
they are crystal controlled is no drawback since you should stay put
on your MAN frequency anyway so the routing software can find you.
For 9600 baud, the Micor is fairly trivial to convert, the Exec takes
a bit more effort. These are the kinds of radios that you get working
and then tuck in a closet somewhere and forget. They'll work for years
with no attention.

Gary
--
Gary Coffman KE4ZV |"If 10% is good enough | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | for Jesus, it's good | uunet!rsiatl!ke4zv!gary
534 Shannon Way | enough for Uncle Sam."| emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -Ray Stevens |

267. Re: Digipeater

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-13 14:30:39 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1993Sep13.143039.24383@ke4zv.atl.ga.us>
Source record: 51554
Cross-posted to: rec.radio.amateur.packet,rec.radio.amateur.digital.misc

In article <1993Sep13.031728.22916@uxmail.ust.hk> ee_hflo@uxmail.ust.hk (ee_help) writes:
> How a digipeater work ? Is it same as a repeater ?

A digipeater is a store and forward relay node. Unlike common repeaters, it does not retransmit what it hears until it has received the entire frame, validated it, and determined that the frame is requesting the particular node to retransmit it now. This information is in the AX25 header of each frame.

Amateur digipeaters normally operate in simplex mode on a single frequency, alternately listening and transmitting, though they can be used on split frequencies. Repeaters normally operate on two separate frequencies in the same band, or crossband, and repeat in realtime, or near realtime, everything they hear on the input channel to the output channel. They may or may not use bit regeneration, but they do not validate the frame, nor do they check to see if they are being requested to relay the frame.

Repeaters have several advantages over digipeaters, and a few disadvantages. Because the digipeater has to receive the entire frame before it starts to retransmit it, it takes 2X+ the channel time of an unrelayed frame. A repeater, because it repeats in realtime, doesn't slow down the frame relay except for some initial keyup delay at the start of activity. Thus a digipeater cuts the effective throughput of a channel in half while a repeater does not. A repeater offers another more important advantage. It allows every station to hear every other station. This is because all stations transmit on the repeater input and listen on the repeater output. Everything the repeater hears, every station hears. This eliminates a problem called the hidden terminal problem which is the bane of simplex digipeater operation.

Because digipeaters and repeaters are sited at preferred locations, often the highest spot around, they hear every transmission made in the area. Because user stations generally aren't in such preferred locations, they generally don't hear most of the other stations on channel. This can result in collisions because several user stations may key up on top of each other because they can't hear each other. But the digipeater can, and what it receives is then just a scrambled mess. So it won't retransmit *any* of the frames being sent. Since packet is an ARQ protocol, all the user stations will continue to try to send their frame, and will continue to collide and little channel throughput will occur. This problem is greatly reduced by a repeater. Since every station monitors the repeater output, they hear every other station on the network. So if another station is transmitting, they will refrain from transmitting until the other station finishes it's

transmission. This solves the hidden terminal problem and greatly increases the channel's effective capacity.

Now I mentioned that repeaters have some disadvantages. The first should be obvious, two frequencies are used instead of one. This is offset by the higher utilization the repeater offers. The second disadvantage of the repeater is that if it fails, all stations on the network are out of service even if they were in simplex range of each other. This is because they aren't listening on the frequency on which they are transmitting. An operator must intervene and change the frequencies of the radios to maintain partial network operation in case of repeater failure. Repeater owners usually go to great pains to maintain reliable service so this usually isn't a serious concern.

Gary
--
Gary Coffman KE4ZV |"If 10% is good enough | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | for Jesus, it's good | uunet!rsiatl!ke4zv!gary
534 Shannon Way | enough for Uncle Sam."| emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -Ray Stevens |

268. HF digital BBS

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-13 20:29:54 UTC
From: pineapp@netcom.com
Message-ID: <pineappCDB7Lv.DLC@netcom.com>
Source record: 51555

KB6BT de K7SLI GA+?
ZCZC Nr 20158 Bulletin K7SLI 0818/2201Z
Dig MB U.S. West (13-Aug-93)

Bid: DMBUSW.08

These digital mailbox stations located west of the Mississippi River in
the continental United States operate 24 hours a day (unless noted) on
the mark carrier frequencies (LSB for Clover) listed. (Other directories
are published for different parts of the world.)

AA5BJ in Ruidoso (.NM.USA.NA) A 10132

AA5CQ/7 John in Las Vegas (.#SONEV.NV.USA.NA) APL
A 7071 10140.5 14070.5

AA7HS Steve in Yakima (#APL.WA.USA.NA) APL
A 28128 21074 21077 14069 14070.5 14071.5 14073 14077 Days
A 7069 7070 7071 7073 7075.5 3605.37 3627 Nights

K0VKH Dick in Rapid City (.SD.USA.NA) HAL
R 14085.625 (74 baud)

K5VMX Bob in Spring (Houston) (.#SETX.TX.USA) Win
A 7068 7069 7071 7073 7075 10125 10126 10127 10128 10129 10130 10140
A 14069 14070.5 14071.5 14072.5 14073.5 14077 18102 18105 18107
A 21073 21074 21075 21076 24915 24925 28125 28127 28147.9
C 7083

K7BUC Del in Phoenix (.AZ.USA.NA) APL
A 7071 10140 14071.5 14073.5 14074 21073.5 (Day)
A 3627 7071 10140 14071.5 14073.5 14074 (Night)

K7SLI Jim in Marysville (.#NWWA.WA.USA.NA) APL
A 3605.37 3627 3629 7069 7071 7073 10127 10128 10129
A 14069 14071 14073 21074 21076 21078

KA0JRQ Larry in Glenwood (Omaha) (.IA.USA.NA) Win
A 3623 3624 3622 7071 7075.5 7073 10125 10127 10128
A 14073 14077 18105 21075 24915
C 3630 7065 7067 10134 10135 14065 14067 18105 21075 24911

KB6BT Walter in Saratoga (San Francisco) (&N6LDL.#NOCAL.CA.USA.NA) Oth
P 10138 14079 21079

KC7J Ron in Tacoma (.WA.USA.NA) APL
A 14069

KD7UM Dave in Salt Lake City (.#SLC.UT.USA.NA) APL
A 3621 3623 3627 7073 7075 7077 10127 10129
A 14069 14073 14077 21071 21075 28127

KE5HE Jim in Hearne (.#STX.TX.USA.NA) Oth
P 10138 14078

KS5V Ed in Canyon Lake (San Antonio/Austin) (.#STX.TX.USA.NA) APL
A 7071 (Day)
A 3622 (Night)

N0IA/7 Bud in Las Vegas (.#SONEV.NV.USA.NA) APL
A 7069 7073 7075 10131 10133 14071
A 3625 3627 3629 (0200-1300z)
A 14075 18105 21073 24913 28127 (1300-0200z)
C 7067 7069 10134 10135 14067
C 3630 7066 7068 (0200-1300z)
C 14069 18105 21067 21069 (1300-0200z)

N5DST Scottin Houson (.SETX.TXUSA.NA) Win
A 3622 623 3624 068 7069 7071 1125 01261012 10128101405
A 1409 140705 1071.5140725 140735 18102.5 2172.5 2174 2176

N5T Tom i Collge Statio (.TX.USA.NA)Win
3628 7078 10136 14078 18106

N6IYA John in Felton (.#NOCAL.CA.USA.NA) RLI
C 7064 7065 7066 7067 7068 7069
C 14064 14065 14066 14067 14068 14069 Days

N7CR Rory in Spokane (.#SPOKN.WA.USA.NA) Win
A 3622 3626 3629 7069 7071 7073 7076 10126 10128 10130
A 14068 14072 14076 18102 21080 24924
C 3625 3630 3634 7076 7078 7080 7086 10128 10134 10136
C 14068 14072 14076 18082 21082 24922

NA7P Greg in Edmonds (Seattle) (.WA.USA.NA) APL
A 14069

NZ2T/5 Bob in Southlake (Dallas/Ft Worth) (.#DFW.TX.USA.NA) Win
A 7069 7071 7073 7075 10123 10125 10127 10135 14069 14071 14073
A 18101 18107 21073 21077 24915

W0LVJ/7 Mike in Spanaway/Graham (.WA.USA.NA) APL
A 3605.37 Primary, 7069 Secondary

W0RLI/7 Hank in West Linn (.OR.USA.NA) RLI
C 7065 7067 7068 (Night)
C 14065 14067 21065 21067 21068 (Day)

W2USA/7 Ft. Lewis ARA, Fort Lewis (.WA.USA.NA) APL
A 28147.9

W5VBO/7 Brian in Peoria (Phoenix) (.AZ.USA.NA) APL
A 3622 3625 7069 7071 7073 10125 10126 10127 10128

A 14070.5 14071.5 14072.5 18102 18105.5 28125

W5XO Dennis in Gause (.#CENTX.TX.USA.NA) RLI
C 3625 3630 7066 7067 7068 7069 10135 10136 14066 14067 14068 14069
C 18084 21066 21067 21069 24924 28084

W7DCR Gary in La Pine (.OR.USA.NA) APL
A 3622 7069 7075.5 10126 10127 10128 14069 14070.5
A 14072.5 18105.5 21072.5 21076 21079 24915 24925

WA8DRZ/6 Craig in Redwood City (San Francisco) (.#NOCAL.CA.USA.NA) APL
A 10128 10129
A 14068.5 14069.5 14070.5 14071.5 14072.5 14073.5 14074.5 14075.5

WB5UJO Hoppy in Marlin, Texas (.TX.USA.NA) KCQ
A 7075

WI7D Jeff in Las Vegas (.#SONEV.NV.USA.NA) Win
AP 3621 3623 3627 7069 7075 7077 10127 10129 10139.5
AP 14069 14072 14073 14077 18099 21073 21075 24925 28073 28125

Please send comments/changes to WA8DRZ.

NNNN
KB6BT de K7SLI GA+?
ZCZC Nr 20159 Bulletin K7SLI 0818/2208Z
Dig MB U.S. East (10-Aug-93)

Bid: DMBUSE.08

These digital mailbox stations located east of the Mississippi River in
the continental United States operate 24 hours a day (unless noted) on
the mark carrier frequencies (LSB for Clover) listed. (Other directories
are published for different parts of the world.)

AA5AU Don in New Orleans (.LA.USA.NA) APL
A 14066

K1HB in Boston (.USA.NA) Oth
P 7042 10147 14079 14085 21079 28079

K1UOL Bob in Bethel (.CT.USA.NA) APL
A 14071.5

K4CJX Steve in Nashville (.#MIDTN.TN.USA.NA) Win
A 3622 7070.5 7072.5 10126 10128 14070 14072 21074
C 3630 7066 7067 7068 10135 10136 14066 14067 14068 21066

K4YZU Bill in Louisville (.KY.USA.NA) APL
A 7069 7071 14069.5 14071.5 10140.5 10141.5 14079.5 21072.5

KB1PJ David in Boston (.NH.USA.NA) APL
A 3622 3625 10126 10128 18102.5 18105.5 24915 24925
C 7066

KC9PX Joe in Janesville (WI.USA.NA) APL
A 3620 3622 3627 7068 7069.9 7070.5 7072.5 7075.5 1817 1819
A 14069 14070.5 14072.5 14073.5 14075 21072.5 21076 21079 28075 28128

VE3AWC in Toronto (.CAN.NA) Oth
P 7071 7073.5 7077 10128 10141 14079 14080 14085

KK4CQ Harvey in Pensacola (.#PNSFL.FL.USA.NA) APL/RLI
A 3622 7070 7070.5 7071 7076 10126 10128 21074 21076
A 14070 14071.5 14072.5 28070 28128
C 3630 7066 7068 10135 10136 14066 14067 14068 28128

N2HOS Jim in New York (.NY.USA.NA)
C 3630 7066 14066 18106 21066

N2JAW Ron in Trenton (.NY.USA.NA) APL
A 3622 7071 7072.5 7075.5 10128 10140.5 14068 14071.5 14073.5 21072.5

N3EXW Louis in Rockville (.MD.USA.NA) APL
A 14068

N8PGR Hans in Cleveland (.#NEOH.OH.USA.NA) APL
A 3622 3623 7072 7068 10127.5 18101.5 14075 14080 21075 21080 28080

W1FYR Alan in Gilsum (.NH.USA.NA) APL NTS ONLY
A 3620 3622 7068 7071 7072.5 10126 10128 10130 14068 14070
A 14071.5 14072.5 14073.5 18102.5 18105.5 21072.5 21074 21079

W2NRE Warren in Scarsdale (.NY.USA.NA) Win
A 3620 3622 7068 7070 7072 10126 10128 14066 14068 14070 14076
A 18105 24915 28074
C 7066 7068 14066 14068 18106 21066

W2TKU/4 Al in Sarasota (.#SRQFL.FL.USA.NA) Win
A 7070 7076 14072 14076 14078 21074 21080 C 7066 7068 14066 14068 21066

W4KAU Dick in Cohutta (.#APL.GA.USA.NA) APL
A 7070.5 7072 7075.5 7076 10126 10128
A 14069 14070.5 17072.5 14076 21072.5 21074

W4NPX BOB IN Charlottsville (.#CVA.VA.USA.NA) Win
A 3620 3627.87 7063.87 7065.87 7068 7070 7072
A 10126 10128 10132.87 10133.87
A 14063.87 14065.87 14070 21063.87 21074 28128
C 3630 7066 7068 10135 10136 14066 14068 21066 28130.13

W5KSI Angelo in New Orleans (.#NOLA.LA.USA.NA) APL
A 3620 3622 7069 7071 7075.5 14068 14070 14073.5 14074 14079
A 21074 21075 21079 28074 28075

W8KCQ Bill in Worthington (.OH.USA.NA) KCQ
AP 3645 7071 7073.5 10128 14079 14080 18107.5 21079 28079

W9MR Ken in Keensburg (.#SEIL.IL.USA.NA) APL
A 3620 3622 3624 7070 7072 7074 7076 10128 10140
A 14068 14070 18104 21072 24925

W9UWE Julius in Chicago (.IL.USA.NA) Oth
P 14079 14085 21079 21081 28075

WA1URA/9 Frank in Grabill (Fort Wayne) (.IN.USA.NA) Win
A 3620 3622 7071 7075.5 10128 10139.5
A 14069 14070.5 14071.5 14073.5 14075 21074 21076 21079
C 3625 3630 7066 7067 7068 10135 10136 14066 14067 14068 21066 21068
P 3622 7072 7077 10122 10127 1072 14077 18107 21072 21077 24907

WA2MFY Peter in Gladstone (.NJ.USA.NA) KCQ
AP 3642 3645 7071 7073.5 7075.5 7076.5 14068 14069 14070.5 14079 14080
AP 21075 21076 21079 28071
AP 3622.5 7077 7081.5 10128 10129.5 14068.5 14069.5 14070.2
AP 14073.5 14074 18107.5 21070.5 21073.5 24915 28074
C 7065 7069 10135 10136 10141.5 14065 14066 14067 14072 14078
C 18100 21065 21070 24925 28084

WA7SJN/9 Bill in Indiana (.IN.USA.NA)
C 7064

WA9FCH/4 John in Reston (.VA.USA.NA) APL
A 7070.5 7071 7072.5 7075.5 10128 10139.5 10140.5 10140
A 14068 14070.5 14071.5 14072.5

WA9WCN Bob in Lapel (Indianapolis) (.IN.USA.NA) Win
P 3624 7070 7072 10126 10128 14074 18102
C 3630 7065 7067 7068 10135 14065 14067 21082 28130

WB1DSW in East Kingston (.NH.USA.NA)
C ??

WB8APD Dave in Willoughby (Cleveland) (.OH.USA.NA) APL
A 14071.5

WX4J Earl in St. Augustine (.FL.USA.NA) APL
A 3618 3620 3624 7069 7071.5 7073.5 7075.5
A 14071.5 14072.5 14073.5 21072.5 21074.5

Please send comments/changes to WA8DRZ.

NNNN
KB6BT de K7SLI GA+?

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dn dmbeu.dir
Dig MB Europe (5-Aug-93)

These digital mailbox stations in Europe operate 24 hours a day (unless noted) on the mark carrier (LSB for Clover) frequencies listed. (Other directories are published for different parts of the world.)

5B4AEJ in Cyprus (.CYP.AS) Oth
P 14068

9A0APL Croatian Amateur Radio Assoc. in Zagreb, Croatia (.HRV.EU) APL
A 14072

CT1BT Teles in Evora, Portugal (.CTEV.PRT.EU) APL
A 7037 7039 14075.5 14078 21076.5 28077.5

DJ0OW in Germany (.DEU.EU) Oth
AP 14079

DK0BLN in Germany (.DEU.EU) Oth
AP 3581 7040 14078 14081 21081 28075

DJ0MCS in Germany (.DEU.EU) Oth
AP 14068

DJ2HZ in Germany (.DEU.EU) Oth
AP 3584.9 7040

DK0MHZ in Germany (.DEU.EU) Oth
AP 3587 7040 14073 21073 28073

DK0MTV Guenter (DJ8CY) in Mainz, Germany (.DEU.EU) PLX
A 3581 7038 14075 14078 14081 21081 28075

DL0BN in Berlin Germany (.DEU.EU) Oth
AP 3581 14079 21081 28075

DL1WX in Germany (.DEU.EU) Oth
AP 7034

DL2FAK in Germany (.DEU.EU) Oth
AP 14079

DL6FZ in Germany (.DEU.EU) Oth
AP 3582 3586 7036 7038 7041 14078 14080 21082 21084 28082

DL7AMW in Germany (.DEU.EU) Oth
AP 14079 14080 21081 28075

EA8CAP in Canary Islands (.ESP.EU) Oth
AP 3581 7038 10141 14072 14073 14071.4 14082 14083
AP 18107 21082 21083 24928

GB7EMX Kit in Aberdeen, Scotland (.#75.GBR.EU) APL
A 3587.5 3588 3588.5 3589 7038 7039 7040 10145 10146
A 14075 14076 14077 14078 21080 21081 28075 28076

GB7SCA John in Plymouth, England (.#44.GBR.EU) PLX
A 3587.5 3588.5 3589 7038 7039 7040 10145 10146
A 14075 14076 14077 14078 21080 21081 28075

GB7SIG Blandford in Dorset, England (.#45.GBR.EU) APL
A 3587.5 3588.5 3589 7038 7039 7040 10145 10146
A 14076 14077 14078 18105.5 21080 21081 28075

HB9AK Paul in Meilen (Zurich), Switzerland (.CHE.EU) PLX
P 7041 14071 14098 21071

A 3581 3583 3588 3589 7038 7040 10141 10146
A 14071.5 14072 14075 14078 21080 21085 28075 28080
C 14098

HB9BJJ in Switzerland (.CHE.EU) Oth
AP 7042 10141 10143 10147 14076 14085

HB9CJC in Switzerland (.CHE.EU) Oth
AP 7041

I5FLN Luciano in Florence, Italy (.ITA.EU) APL
A 14069 (2100-0500z)
A 21070 (0800-1700z)

IK0NNT Sergio in Rome, Italy (.ITA.EU) APL
A 14078

LA0FA in Norway (.NOR.EU) Oth
AP 7034

LA5JEA Platform 16/11-S in the North Sea (.#NORTHSEA.NOR.EU) APL
A 3581.5 3587.5 7038 7039 14068 14071 14075 21072.5 21075 21077

LZ2BE Bob in Razgrad, Bulgaria (.BGR.EU) APL
A 3582 7036 7038 10146 14074 14078 21074

OE4XBU Rudi in Eisenstadt, Austria (.AUT.EU) Win
A 14067.5 14073 14075 14078 21067.5 21073 21075.5

OH2BAW Staffan in Esbo (Helsinki), Finland (.FIN.EU) APL
A 3581.5 3587 7038 10146 14071 14076 21077.5 28077.5

ON6RO Rene in Louveigne-Sprimont, Belgium (.BEL.EU) APL
A 21073 (AF OC 0600-1600z)
A 14073 (NA 1600-0600z)

PA0QRS Piet in Krimpen (Rotterdam), Netherlands (.NLD.EU) APL
A 7034 7037 14067 14070 14072 21082 28082

PA0RVR Richard in Papendrecht, The Netherlands (.#ZH2.NLD.EU) APL
A 14068 14069 14070 14071 14072 14074 14075 14077 (0600-1800z)
P 14064 14065 14069 (2100-0600z)

SL5BO Claes in Enkoping (Stockholm), Sweden (.SWE.EU) APL
A 14077 (or 14078)

SM4CMG Bo in Sweden (.SWE.EU) APL
A 21077

SM6FMB Sven near Gotenburg, Sweden (.SWE.EU) APL
A 7037 7038 7039 10109 10128 10145 10146 14069 14070 14075 14076 14078
A 18102.5 18105.5 21072 21074 21075 21076 28074

U5WF Vladimir in Lvov, Ukraine (.LVV.UKR.EU) APL
A 14075 (except contests)

UA4LCQ Yuri in Ulyanovsk, Russia (.#ULY.RUS.EU) APL
A 14075 21075

Please send comments/changes to WA8DRZ.
KB6BT de WA8DRZ APLink Gateway at 0440z on 930911 B,D,H,?,I,J,K,L,N,R,S,U,V,W >
dn dmbas.dir
Dig MB Asia/Oceania (1-Aug-93)

These digital mailbox stations in Asia and Oceania operate 24 hours a
day (unless noted) on the mark carrier (LSB for Clover) frequencies
listed. (Other directories are published for different parts of the
world.)

9M2CR Colin in Port Dixon, Maylaysia (.MYS.AS) PLX
P 14072 14074 14076 14078

BV5AF Bolon in Taiwan (.TWN.CHN.AS) APL/RLI
A 14069 14072 14075 14077 14079 21070 21072 21076
C 10135 14084 21084

BV5AG Katy in Taiwan (.TWN.CHN.AS) APL
A 21072

DU1AUJ Lynn in Quezon City, Philippines (.SCAN.PHL.OC) APL
A 14070 (1300-2300z)
A 21070 (2300-1300z)

DU3HF Francis in Manila, Philippines (.MNL.PHL.OC) APL
A 7020

DU9BC Fred in Davao City, Phillipines (.DVO.PHL.OC) APL
A 7012.8 (2300-1000z)
A 14072 (1000-2300z)

DU9WX Dodong in Iligan City, Phillipines (.PHL.OC) APL
A 7012.8

FK8BK Louis in Noumea, New Caledonia (.NCL.OC) APL
A 14066 (0700-1300z)

JA1JTA Mike in Sagamihara, Japan (.JPN.AS) APL
A 14070 (Sat/Sun only)

JA3FJ Goro in Chiba, Japan (.JPN.AS) PLX
AP 14071 14072 14074 14076 14078

JA5TX Mitsuo in Kochi, Japan (.JPN.AS) PLX
AP 14071 14072 14074 14076 14078

JR3TMW
P 14072

VK2AGE Gordon in Goonellabah (Lismore), Australia (.NSW.AUS.OC) Win
A 7045 10109 14075 14077 21076
(NA 0000-0600z, 0700-0800z & 1030-1130z
AF 0600-0700z, EU & AS 0800-1030z, 1130-0000z)

VK2EHQ Peter in Kulnura (Sydney), Australia (.NSW.AUS.OC) APL
A 14070.5

VK2OG Peter in Quaker's Hill (Sydney), Australia (.NSW.AUS.OC) APL
A 14069 (NA 2000-1200z, EU 1200-2000z)

VK2FPV Paul in Sydney, Australia (.NSW.AUS.OC) APL
A 21069 (weekends)

VK3WZ John in Melbourne, Australia (VIC.AUS.OC) APL
A 14075

VK6PK in Australia (.#WA.AUS.OC) Oth
A 14075.5

VK6TN Ernie in Glen Forrest (Perth) (.#WA.AUS.OC) APL
A 14071 (VK/ZL 0100-0500z, NA 1000-1400z EU 1400-0100z)
A 21079 (AF/VU 0500-0800z, Far East 0800-1000z)

VU2DPG Dieter in New Dehli, India (.DEL.IND.AS) APL
A 14079 (1400-0330z), 21079 (0330-1000z), 21079 (1100-1400)
X 21115 (1000-1100z)

ZL1ACO Neill in Pukekohe (Auckland), New Zealand (.PUK.NZL.OC) APL
A 10128 14070.5 14072.5 14073.5 14075 14075.5 21076 21079

ZL4AK Bill in Oamaru, New Zealand (.OAU.NZL.OC) APL
A 14069 14070.5 14072 14074 14075 14077 21074 21076 21079 28074

Please send comments/changes to WA8DRZ.

KB6BT de WA8DRZ APLink Gateway at 0443z on 930911 B,D,H,?,I,J,K,L,N,R,S,U,V,W >
dn dmbam.dir
Dig MB Americas (10-Aug-93)

These digital mailbox stations in North and South America outside of the
USA operate 24 hours a day (unless noted) on the mark carrier
frequencies listed. (Other directories are published for different parts
of the world.)

AA6VY/XE2 Reg in Punta Banda, Mexico (.BCN.MEX.NA) APL
A 10127 10128 10129 14068.5 10469.5 14070.5 2170 21074 21076

AH6IH Bill in Honolulu, Hawaii (#APL.HI.USA.OC) APL
A 14068

AL7LS Bruce in Delta Junction, Alaska (.AK.USA.NA) APL
14072.5

CE3GDN Don in Santiago, Chile (.#STG.CHL.SA) APL
A 7037 7070 14068 14072 14074 21072 21074 21076 21078
A 24915 28074 28135

HC5K Ted in Cuenca, Ecuador (.ECU.SA) Oth
AP 21073 21074 21075

KB8JLV Stan in Adak, Alaska (.#ADAK.AK.USA.NA) APL
A 14070.5 (1700-0600z)

KP4GE Ramon in Caguas, Puerto Rico (.PR.USA.CAR.NA) Win
A 14074 14076 21074 21076
C 14065 14068 21065 21068

LU3EX in Argentina (.ARG.SA)
P 14072 21072

NH6VT Mark in Waialua, Hawaii (.HI.USA.OC) APL
(temporarily QRT)

TG9SO Roberto in Guatemala City, Guatemala (GTM.NA) APL
A 21074 (Day)
A 7068 (Night)

TI0RC Radio Club of Costa Rica in San Jose (.#SJO.CRI.NA) APL
A 14068

VE2FK Claude in Montreal, Quebec, Canada (.CAN.NA) KCQ
AP 7071 7072 7073.5 7076 7077 18101.5 18102.5 21069 21074 21079 28079
(0500-0200z)

VE3AWC Dave in Richmond Hill, Ontario, Canada (.ON.CAN.NA) KCQ
AP 7071 7073.5 7077 14078 14079 14080

VE3EG Roy in Aurora, Ontario, Canada (.ON.CAN.NA) KCQ
AP 7071 7073.5 7076.5 7077 (0700-0900 & 1000-2300 EDT)
AP 14080 (0900-1000 EDT)

VE3PAO Peter in Coldwater (Orillia), Ontario, Canada (#CON.ON.CAN.NA) APL
A 14068.5

VE6PD Joe in Lethbridge, Alberta (.AB.CAN.NA) APL
A 10126 10128 10139.5 10140 14069 14070.5 14076 21072.5 21076 28075

VE7CIZ George in British Columbia, Canada (.#VANC.BC.CAN.NA) Oth
AP 14071
AP 10119 (2300-0400z)

VO1BBS Hugh in Seal Cove, Newfoundland (.NF.CAN.NA) APL
A 14068.5

VP8BFH Bob in Port Stanley, Falkland Islands (.STLY.FALK.SA) APL
A 21070 day, 14066 nite

W6HTH William in Honolulu, Hawaii (.HI.USA.OC) APL
A 14070.2

ZF1GC Frank in Bodden Town, Grand Cayman Island (#GC.CYM.CAR.NA) APL
A 14070.5 14071.5 14072.5 14073.5 14074.5 14075.5 14076 21080
(1100-0300z Weekdays, 1100-2200 Fri, 0000-0300z Sat)

Please send comments/changes to WA8DRZ.
KB6BT de WA8DRZ APLink Gateway at 0447z on 930911 B,D,H,?,I,J,K,L,N,R,S,U,V,W >

dn dmbaf.dir
Dig MB Africa/Mid East (5-Aug-93)

These digital mailbox stations in Africa and the Middle East operate 24
hours a day (unless noted) on the mark carrier (LSB for Clover)
frequencies listed. (Other directories are published for different
parts of the world.)

4X6SL Kuti in Petach-Tikva (Tel-Aviv), Isreal (.ISR.AS) APL
A 14071 (1800-0600z)
A 21071 (0600-1800z)

5N0FDR in Nigeria (.NGA.AF) Oth
P 14078

9K2DZ Abdul in Kuwait City (.KWT.AS) APL
A 7071 10128 14066 14070 14074 14076.5 14079
A 21076 21076.5 21079 18105.5 24925

9K2EC Mohsin in Kuwait (.KWT.AS) APL
A 14066 14071 14072 14079 18105.5 21071 21081 28079

9X5LJ Jacques in Kigali, Rwanda (.#KGL.RWA.AF) APL
A 14073 (1700-0500 NA)
A 21073 (0500-1700 EU)

SU1ER Ezzat in Heliopolis, Cairo, Egypt (.CAI.EGY.AF) APL/PCC
A 14066 or 14070 (1500-2000z)
A 21066 or 21070 (0600-0900z Fri/Sat)
C 14083 (1500-2000z)
C 21083 (0600-0900z Fri/Sat)

TU2BB Felix in Abidjan, Ivory Coast (.CIV.AF) APL
A 14076 (Night)
A 21076 (Day)
(weekends closed)

TY1PS Peter in Cotonou, Benin (.BEN.AF) Win
A 14072 14078 21072 21078 28072 28078
C 14064 14066 21066
(0630-1400z Beam 120, 1400-1900z Beam 010, 1900-0630z Beam 310)

V51NH Nico in Windhoek, Namibia (.NAM.AF) APL
A 14070

ZS5S Joe and Mary in Howick, South Africa (.NTL.ZAF.AF) APL/RLI
A 7037 14069 14073 21069 21073
C 7039.1 14066 21066
X 7043
NA 0630-0730 1700-0600 EU 0730-1200 1300-1430 1500-0600
OC 0600-0630 SA 1430-1500

ZS6KM Mario in Pretoria, South Africa (.TVL.ZAF.AF) APL
A 14075 (0430-0700z) NA

A 21075.5 (0700-1800z) EU
A 14075 (1800-2000z) EU

Please send comments/changes to WA8DRZ.
KB6BT de WA8DRZ APLink Gateway at 0449z on 930911 B,D,H,?,I,J,K,L,N,R,S,U,V,W >

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.---+-------------------------.
INTERNET: pineapp@netcom.com	Daniel Curry WB6STW
AMPRNET : dan@wb6stw.ampr.org [44.4.20.144]	E-:-) Ham Radio Operator
AX.25 : wb6stw@n0ary.#NOCAL.CA.USA.NA	Redwood City, CA USA
'---+-------------------------'

269. Used Micors & Exec IIs

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-13 22:13:04 UTC
From: Burt.Kaufman@f40.n382.z1.fidonet.org
Message-ID: <748051212.AA00123@afarm.uucp>
Source record: 51565

-=> Quoting Gary Coffman to All <=-

GC> You can find used Micors and
GC> Exec IIs at hamfests in the $50-$90 range all day long. You can't build
GC> a radio of this quality for that amount of money. Finding the parts
GC> alone is an exercise in futility. These radios use very good filters
GC> and inductors made especially for Motorola and GE. They aren't
GC> commodity items.
A few questions about these radios, if I may. What's the approximate
power output? How many frequencies/crystals can be installed at one
time? Are there desireable options/variations to look for, less
desireable models, etc? Is there a business that sells/resells these,
perhaps with a warranty? Is there any readily available info about
using these units for amateur use, what to expect/watch for, etc.?

I'm tired of the struggle to get through with 5-6 watts. I've got an
old 10 W amplifier I'm going to bring up this week, but that is a
stopgap. Too many other stations aren't hearing me, I think.

... Relax. Don't worry. Have a home brew.
___ Blue Wave/QWK v2.12

270. Re: SF Bay Area TCP/IP frequencies

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-14 00:44:59 UTC
From: bwilkins@iat.holonet.net
Message-ID: <CDBJF3.7sy@iat.holonet.net>
Source record: 51556

billd@piton.Corp.Sun.COM (Bill Dorsey) writes:
: I just installed a TCP/IP driver on my Sparcstation (thanks to the helpful
: suggestions of fellow netters), and have been monitoring various packet
: frequencies in my area (Mountain View), but haven't heard any TCP/IP traffic.
: Can anyone give me a list of frequencies used here in the Bay Area for TCP/IP
: traffic?
.....
:
: --
: Bill Dorsey billd@piton.corp.sun.com
: PGP 2.X public key n3lmf@n0ary.#nocal.ca.us.na
: available on request
:

TCP/IP nodes and servers are on 145.750 through out most of northern
california. Quite a bit of activity in the silicon valley. Servers can
link to each other on higher bands as part of the wan.

bob n6fri

--
Bob Wilkins n6fri voice 440.250+ 100pl san francisco bay area
bwilkins@cave.org packet n6fri @ n6eeg.#nocal.ca.usa.na

271. Looking for a source of NOSintro in the US

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-14 02:17:58 UTC
From: segrest@bobseg.enet.dec.com
Message-ID: <2739km$m4c@sousa.ako.dec.com>
Source record: 51557

I understand that the NOSintro book is now available from the ARRL. Can anyone tell how to contact the ARRL library to get the specifics?

--
Bob Segrest
segrest@bobseg.enet.dec.com

272. Kansas City TCP/IP?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-14 07:04:49 UTC
From: mmorgida@news.delphi.com
Message-ID: <273qeh$30d@news.delphi.com>
Source record: 51558

I am in Leavenworth County (30 mi NW of KC) and would
like to get the frequencies for the area TCP/IP
LAN. If you can help, please send EMAIL. Thanks.

73, Mark. aa2ma.
--
Internet: mmorgida@delphi.com

273. Re: Maycom with Macs??

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-14 15:37:27 UTC
From: jvp@tools1.ee.iastate.edu
Message-ID: <jvp.748021047@tools1.ee.iastate.edu>
Source record: 51561
Cross-posted to: rec.radio.amateur.packet,rec.radio.amateur.digital.misc

In <01H2XKLSPWH29JE136@splava.cc.plattsburgh.edu> BURDOGJ@splava.cc.PLattsburgh.EDU (GORDY BURDO) writes:

>This is probably a FAQ and if it is I apologize. Does anyone on the list
>know of Macintosh software to run a Baycom type modem? IF you do, would
>you please email me or post it here. Thanx in advance,

First, you need SoftKiss which is a serial driver replacement. It drives the BayComm or PacketMac modems and emulates a KISS TNC.

Then you have exactly two (to my knowledge) choices for application.

1) Savant - An AX.25 program that provides a multiple-window split screen true Macintosh GUI. Every time you open a new connection, a new window opens for that connection. Switching "channels" is as easy as clicking on a window to bring it to the front. Savant is smart enough to route all incoming packets to the right window and vice-versa. It also has other nice features like a Stations Heard window which constantly shows you the most recent 64 stations heard on the air, and how many packets they have recently sent, etc. Savant works with any TNC with KISS mode.

2) Net/Mac. A program written for a DOS machine, and ported to the Mac. It is hard to get working, and provides a terrible user interface, but it does tcp/ip.

I may be a bit biased, as I'm the author of Savant. :)

+---+
| Jim Van Peursem - Ph.D. Student - Ham Radio -> KE0PH |
| Department of Electrical Engineering and Computer Engineering |
| Iowa State University - Ames, IA 50011 |
| internet - jvp@iastate.edu -or- jvp@cpre1.ee.iastate.edu |
+---+
--
+---+
| Jim Van Peursem - Dept of EE and CprE - Iowa State University |
| Ames, IA 50011 - internet: jvp@iastate or tools1.ee.iastate.edu |
+---+

274. Re: 2-m homebrew packet rig?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-14 16:00:53 UTC
From: Chris Terwilliger <a229aa@email.sps.mot.com>
Message-ID: <1993Sep14.160053.26686@newsgate.sps.mot.com>
Source record: 51564

In article <1993Sep12.134230.19253@ke4zv.atl.ga.us> Gary Coffman,
gary@ke4zv.atl.ga.us writes:

>For 9600 baud, the Micor is fairly trivial to convert,

please elaborate...

* Chris Terwilliger, AA7WD a229aa@email.sps.mot.com *
* Motorola "And now, *
* Phoenix Corporate Research Labs the sequence of events, *
* 2100 E. Elliot Rd. EL508 in no particular order." *
* Tempe, AZ 85284 - Dan Rather *

275. <None>

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-14 20:50:35 UTC
From: swain_i@kosmos.wcc.govt.nz
Message-ID: <1993Sep14.205035.1@kosmos.wcc.govt.nz>
Source record: 51560

Hi there I just NOS off a simtal site WNOS4A8.zip was the filename
the question is can this version run with a Baycom type modem
or will I need a driver ??... If I need a driver would it be possible
for some one to encode and send it by ?..

73 de ZL2IAS Ian. Wellington New Zealand

276. Re: Packet on a Unix box?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-15 00:26:15 UTC
From: pjb@cco.caltech.edu
Message-ID: <275nf7INN6nh@gap.caltech.edu>
Source record: 51562

A cure all for interfacing unix with packet is to buy a DOS box to use as a router/radio controller. Run Wg7j or ka9q nos on the dos box, and tell it to run SLIP for the connection back to the unix box. (your unix box does have a SLIP tcp/ip , doesn't it!?).

Note that you can use an "XT" for the router and that it does not need a screen or even a hard drive (NOS fits on a 1.2 floppy). It should cost you less than $100 to get that kind of hardware, used, of course.

This cures several problems:

NOS on the PC is constantly being updated. it has all the latest drivers available (KISS TNC, SCC/DRSI, Gracilis, BAYCOM via packet driver, G8BPQ, etc...).

Some versions of unix ham software have a security hole. If someone sets mycall to root on the air, and connects to your unix station, they can becom e root on your unix box. ain't that nice? Having rth e PC be the router means using your unix's native tcp/ip and security. I'm not sure which version of the UNIX ka9q tcp/ip has this problem, or if it had been fixed. Just heard it in the rumor mill.

If you have SLIP access to the internet (via work or school) , you won't have to choose between accessing internet and being on amprnet. You can set up two SLIP interfaces on the nos box (one to go to the unix box, one to go to the telephone modem), the TNCS, and with the proper routing config on the nos box, access both internet and 44-net from the unix box. warning: this requires some care : see the ipaccess/tcp access commands in jnos for setting up proper security for this configuration. without proper security, this becomes a completely open internet/packet gateway. currently, only half-open gateways are legal (the ham must initiate the connection, not the guy on internet). you might not even want to run a gateway at all, and it is posible to hide this capability .

73 de Paul KI6CQ
pjb@cco.caltech.edu

277. Can you build a TNC?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-15 02:23:39 UTC
From: pachner@csd4.csd.uwm.edu
Message-ID: <275ubbINNp05@uwm.edu>
Source record: 51563

I am new to Amateur Radio and was curious to who a TNC works? Is it possible
to modify an external modem to become a TNC?

What is an inexpensive TNC that would be good for someone to begin on?

--
Thomas Jay Pachner -=- Music Major, Bassist, Gamer, and Amateur Operator
University of Wisconsin - Milwaukee - pachner@csd4.csd.uwm.edu
BARNEY MUST DIE!!!!!!!!!
Amateur Call Sign: waiting since July 10 (it's worse than tax returns)

278. Guide to the Personal Radio Newsgroups

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-15 11:00:58 UTC
From: pschleck@unomaha.edu
Message-ID: <radio/personal-intro-1-748090852@unomaha.edu>
Source record: 51566
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.packet,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.info,rec.answers,news.answers

```
Posted-By: auto-faq 2.4
Archive-name: radio/personal-intro
Revision: 1.4 06/30/93 12:04:14
Changes: new rec.radio.amateur.* newsgroups, cs.utexas.edu gateway

(Note: The following is reprinted with the permission of the author.)

This message describes the rec.radio.amateur.*, rec.radio.cb, rec.radio.info,
and rec.radio.swap newsgroups. It is intended to serve as a guide for the new
reader on what to find where. Questions and comments may be directed to the
author, Jay Maynard, K5ZC, by Internet electronic mail at
jmaynard@oac.hsc.uth.tmc.edu. This message was last changed on 30 June 1993 to
add the groups created during the latest reorganization vote and the
description of the cs.utexas.edu gateway.

History
=======

Way back when, before there was a Usenet, the Internet hosted a mailing list
for hams, called (appropriately enough) INFO-HAMS. Ham radio discussions
were held on the mailing list, and sent to the mailboxes of those who had
signed up for it. When the Usenet software was created, and net news as we
now know it was developed, a newsgroup was created for hams: net.ham-radio.
The mailing list and the newsgroup were gatewayed together, eventually.

As the net grew, and as packet radio came into vogue, packet discussion began
to dominate other topics in the group and on the list. This resulted in the
logical solution: a group was created to hold the packet discussion, and
another corresponding mailing list was created as well: net.ham-radio.packet
and PACKET-RADIO, respectively.

These two groups served for several years, and went through Usenet's Great
Renaming essentially unchanged, moving from net.ham-radio[.packet] to
rec.ham-radio[.packet]. Readership and volume grew with the rest of the
network.

The INFO-HAMS mailing list was originally run from a US Army computer at
White Sands Missile Range, SIMTEL20. There were few problems with this
arrangement, but one was that the system was not supposed to be used for
commercial purposes. Since one of hams' favorite pastimes is swapping
gear, it was natural for hams to post messages about equipment for sale
to INFO-HAMS/rec.ham-radio. This ran afoul of SIMTEL20's no-commercial-use
restriction, and after some argument, a group was created specifically
for messages like that: rec.ham-radio.swap. This group wasn't gatewayed to
```

a mailing list, thus avoiding problems.

While all this was happening, other folks wanted to discuss other aspects of the world of radio than the personal communications services. Those folks created the rec.radio.shortwave and rec.radio.noncomm newsgroups, and established the precedent of the rec.radio.* hierarchy, which in turn reflected Usenet's overall trend toward a hierarchical name structure.

The debate between proponents of a no-code ham radio license and its opponents grew fierce and voluminous in late 1989 and 1990. Eventually, both sides grew weary of the debate, and those who had not been involved even more so. A proposal for a newsgroup dedicated to licensing issues failed. A later proposal was made for a group that would cover the many recurring legal issues discussions. During discussion of the latter proposal, it became clear that it would be desirable to fit the ham radio groups under the rec.radio.* hierarchy. A full-blown reorganization was passed by Usenet voters in January 1991, leading to the overall structure we now use.

After the reorganization, more and more regular information postings began to appear, and were spread out across the various groups in rec.radio.*. Taking the successful example of the news.answers group, where informational postings from across the net are sent, the group rec.radio.info was created in December, 1992, with Mark Salyzyn, VE6MGS, initially serving as moderator.

In January, 1993, many users started complaining about the volume in rec.radio.amateur.misc. This led to a discussion about a second reorganization, which sparked the creation of a mailing list by Ian Kluft, KD6EUI. This list, which was eventually joined by many of the most prolific posters to the ham radio groups, came up with a proposal to add 11 groups to the rec.radio.amateur hierarchy in April 1993. The subsequent vote, held in May and early June, approved the creation of five groups: rec.radio.amateur.digital.misc (to replace .packet), .equipment, .homebrew, .antenna, and .space.

The Current Groups

I can hear you asking, "OK, so this is all neat history, but what does it have to do with me now?" The answer is that the history of each group has a direct bearing on what the group is used for, and what's considered appropriate where.

The easy one is rec.radio.amateur.misc. It is what rec.ham-radio was renamed to during the reorganization. Any message that's not more appropriate in one of the other groups belongs here, from contesting to DX to ragchewing on VHF to information on becoming a ham.

The group rec.radio.amateur.digital.misc is for discussions related to (surprise!) digital amateur radio. This doesn't have to be the common two-meter AX.25 variety of packet radio, either; some of the most knowledgeable folks in radio digital communications can be found here, and anything in the general area is welcome. The name was changed to emphasize this, and to encourage discussion not only of other text-based digital modes,

such as AMTOR, RTTY, and Clover, but things like digital voice and video as well. The former group, rec.radio.amateur.packet, has not been removed as of this writing, but it is obsolete, and you should use .digital.misc instead. The group has the .misc as part of the name to allow further specialization if the users wish it, such as .digital.tcp-ip.

The swap group is now rec.radio.swap. This recognizes a fact that became evident shortly after the original group was formed: Hams don't just swap ham radio gear, and other folks besides hams swap ham equipment. If you have radio equipment, or test gear, or computer stuff that hams would be interested in, here's the place. Equipment wanted postings belong here too. Discussions about the equipment generally don't; if you wish to discuss a particular posting with the buyer, email is a much better way to do it, and the other groups, especially .equipment and .homebrew, are the place for public discussions. There is now a regular posting with information on how to go about buying and selling items in rec.radio.swap; please refer to it before you post there.

The first reorganization added two groups to the list, one of which is rec.radio.amateur.policy. This group was created as a place for all the discussions that seem to drag on interminably about the many rules, regulations, legalities, and policies that surround amateur radio, both existing and proposed. The neverending no-code debate goes here, as does the New Jersey scanner law, the legality of ordering a pizza on the autopatch, what a bunch of rotten no-goodniks the local frequency coordinating body is, and so on.

The other added group is rec.radio.cb. This is the place for all discussion about the Citizens' Band radio service. Such discussions have been very inflammatory in rec.ham-radio in the past; please do not cross-post to both rec.radio.cb and rec.radio.amateur.* unless the topic is genuinely of interest to both hams and CBers - and very few topics are.

The rec.radio.info group is just what its name implies: it's the place where informational messages from across rec.radio.* may be found, regardless of where else they're posted. As of this writing, information posted to the group includes Cary Oler's daily solar progagation bulletins, ARRL bulletins, the Frequently Asked Questions files for the various groups, and radio modification instructions. This group is moderated, so you cannot post to it directly; if you try, even if your message is crossposted to one of the other groups, your message will be mailed to the moderator, who is currently Mark Salyzyn, VE6MGS. The email address for submissions to the group is rec-radio-info@ve6mgs.ampr.ab.ca. Inquires and other administrivia should be directed to rec-radio-request@ve6mgs.ampr.ab.ca. For more information about rec.radio.info, consult the introduction and posting guidelines that are regularly posted to that newsgroup.

The groups rec.radio.amateur.antenna, .equipment, .homebrew, and .space are for more specialized areas of ham radio: discussions about antennas, commercially-made equipment, homebrewing, and amateur radio space operations. The .equipment group is not the place for buying or selling equipment; that's what rec.radio.swap is for. Similarly, the .space group is specifically about amateur radio in space, such as the OSCAR program and SAREX, the Shuttle

Amateur Radio EXperiment; other groups cover other aspects of satellites and space. Homebrewing isn't about making your own alcoholic beverages at home (that's rec.crafts.brewing), but rather construction of radio and electronic equipment by the amateur experimenter.

The rec.radio.amateur.misc, .packet, and .policy groups, and the rec.radio.info group, are available by Internet electronic mail in digest format; send a mail message containing "help" on a line by itself to listserv@ucsd.edu for instructions on how to use the mail server. The rec.radio.swap group is not available for reading by electronic mail. At this writing, the most recently added groups are also not available for reading by electronic mail, although that may change.

All of the groups can be posted to by electronic mail, though, by using a gateway at the University of Texas at Austin. To post a message this way, change the name of the group you wish to post to by replacing all of the '.'s with '-'s - for example, rec.radio.swap becomes rec-radio-swap - and send to that name@cs.utexas.edu (rec-radio-swap@cs.utexas.edu, for example). You may crosspost by including multiple addresses as Cc: entries (but see below). This gateway's continued availability is at the pleasure of the admins at UT-Austin, and is subject to going away at any time - and especially if forgeries and other net.abuses become a problem. You have been warned.

A Few Words on Crossposting
==========

Please do not crosspost messages to two or more groups unless there is genuine interest in both groups in the topic being discussed, and when you do, please include a header line of the form "Followup-To: group.name" in your article's headers (before the first blank line). This will cause followups to your article to go to the group listed in the Followup-To: line. If you wish to have replies to go to you by email, rather than be posted, use the word "poster" instead of the name of a group. Such a line appears in the headers of this article.

One of the few examples of productive cross-posting is with the rec.radio.info newsgroup. To provide a filtered presentation of information articles, while still maintaining visibility in their home newsgroups, the moderator strongly encourages cross-posting. All information articles should be submitted to the rec.radio.info moderator so that he may simultaneously cross-post your information to the appropriate newsgroups. Most newsreaders will only present the article once, and network bandwidth is conserved since only one article is propagated. If you make regular informational postings, and have made arrangements with the moderator to post directly to the group, please cross-post as appropriate.

--
Jay Maynard, EMT-P, K5ZC, PP-ASEL | Never ascribe to malice that which can
jmaynard@oac.hsc.uth.tmc.edu | adequately be explained by stupidity.
"If my car ran OS/2, it'd be there by now" -- bumper sticker
GCS d++ p+ c++ l+ m+/- s/++ g++ w++ t+ r

--
73, Paul W. Schleck, KD3FU

pschleck@unomaha.edu

Celebrating 60 years of the Univ. of Maryland ARA - W3EAX (1933-1993)

279. What is digital bandwidth?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-15 11:23:35 UTC
From: segrest@bobseg.enet.dec.com
Message-ID: <276tvn$l9n@sousa.ako.dec.com>
Source record: 51569

I have been running into conflicting stories lately and would appreciate some clarification...

What is the formula for determining band width for packet operation?

I presume that speed (baud rate) and deviation are the key parameters but would like to know how the numbers are used.

Can you operate 9600 baud packet in a 25khz channel?

Any help or pointers to appropriate documentation greatly appreciated..

--
Bob Segrest
segrest@bobseg.enet.dec.com

280. Re: 9600 baud - commercially available?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-15 11:31:18 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1993Sep15.113118.4166@ke4zv.atl.ga.us>
Source record: 51568
Cross-posted to: rec.radio.amateur.packet,rec.radio.amateur.digital.misc

In article <2242@arrl.org> bbattles@arrl.org (Brian Battles WS1O) writes:
>In rec.radio.amateur.digital.misc, richgi@microsoft.com (Richard Gillmann)
>writes:
>>Can a 9600-baud packet station be set up entirely out of commercially
>>available items (not kits)? This would have to include a TNC, a 9600-baud
>>modem and a VHF or UHF radio.
>
> Gracilis sells the PackeTwin system with a plug-in card for your
>IBM-compatible PC. It includes a 'DSY modem (9600 or 19,200 bit/s) and
>a TEK 440-MHz transceiver (2 W). Handy! (Mine was working fine into the local

Note, the Gracillis card does *not* include a WA4DSY (aka GRAPES) 56 kb
RF modem. It does include provisions for *driving* one externally through
one of it's ports. 1200 baud, 2400 baud, 9600 baud, and 19.2 kb, daughter
card modems are available for the card's other port. They're actuallly made
for Gracillis by Kantronics. The Tekk radio is small, originally intended
for board mounting. It is powered and driven off the daughtercard modem.

Gary
--
Gary Coffman KE4ZV |"If 10% is good enough | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | for Jesus, it's good | uunet!rsiatl!ke4zv!gary
534 Shannon Way | enough for Uncle Sam."| emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -Ray Stevens |

281. Re: Can you build a TNC?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-15 12:01:44 UTC
From: pcr@vnet.ibm.com
Message-ID: <CDE9Ew.n98@hawnews.watson.ibm.com>
Source record: 51567

In <275ubbINNp05@uwm.edu> pachner@csd4.csd.uwm.edu (Thomas Jay Pachner) writes:
>I am new to Amateur Radio and was curious to who a TNC works? Is it possible
>to modify an external modem to become a TNC?
>
>What is an inexpensive TNC that would be good for someone to begin on?
>
>
>--
>Thomas Jay Pachner -=- Music Major, Bassist, Gamer, and Amateur Operator
>University of Wisconsin - Milwaukee - pachner@csd4.csd.uwm.edu
>BARNEY MUST DIE!!!!!!!!!
>Amateur Call Sign: waiting since July 10 (it's worse than tax returns)

A TNC is a modem (Bell 202 (or is it 208?)) and a processor. The processor implements the AX.25 protocol that is used by packet. Now, the processor is just some kind of micro (the TNC-2 that lots of companies cloned is a Z-80), but it doesn't have to be - the modem doesn't care.

If you see advertisements or messages referring to a 'Baycom' TNC, then you just get the modem. You need to hook it to a PC, and the PC does all the software work. There are several out there, but they all use a PC (or in some cases a Commodore 64) in place of the dedicated TNC processor.

I've seen Baycom-style TNCs in the $50-60 range, but MFJ sells their TNC-2 clone for $120. So, what you get depends on how poor you feel and if you have a PC sitting around.

...phil
---
phillip c. reed
pcr@vnet.ibm.com / KD4PWI@N4YUU.CKY.KY.USA.NA / CI$:72754,513
* It is highly unlikely that the opinions expressed herein are those of IBM *
* or any of it's operating units. *

282. HF packet for IC720A

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-15 13:32:11 UTC
From: an28862@anon.penet.fi
Message-ID: <133302Z15091993@anon.penet.fi>
Source record: 51570

I have a MFJ1270B with an add on tuner that I am trying to hookup
to my Icom 720A for HF packet operation. The problem I am having
is that I can not seem to drive the audio circuits of the 720.
The radio PTT is keyed and the radio goes into transmit but no
audio is present, FYI receive works fine. Has anyone encoutered
this type of problem and can tell me what to do I would be very
greatful. Please post the resonse to my email account
(scottm@csg.mot.com)
thanks

To find out more about the anon service, send mail to help@anon.penet.fi.
Due to the double-blind, any mail replies to this message will be anonymized,
and an anonymous id will be allocated automatically. You have been warned.
Please report any problems, inappropriate use etc. to admin@anon.penet.fi.

283. Re: 2-m homebrew packet rig?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-15 14:50:34 UTC
From: sbrown@charon.dseg.ti.com
Message-ID: <SBROWN.93Sep15085034@charon.dseg.ti.com>
Source record: 51572

In article <1993Sep14.160053.26686@newsgate.sps.mot.com> Chris Terwilliger
<a229aa@email.sps.mot.com> writes:

> In article <1993Sep12.134230.19253@ke4zv.atl.ga.us> Gary Coffman,
> gary@ke4zv.atl.ga.us writes:
>
> >For 9600 baud, the Micor is fairly trivial to convert,
>
> please elaborate...

Yes, please elaborate _on the net_. I tried to send you a message every
way I could think of and got kickbacks.

```
*******************************************
| Steve Brown, WD5HCY | |
| sbrown@charon.dseg.ti.com | Simplicate |
| wd5hcy@wd5hcy.ampr.org | and add |
| [44.28.0.61] | lightness. |
| wd5hcy@kf5mg.#dfw.tx.usa.na | |
*******************************************
```

284. Re: Can you build a TNC?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-15 15:05:42 UTC
From: gila005@uabdpo.dpo.uab.edu
Message-ID: <gila005-150993100602@right.dom.uab.edu>
Source record: 51571

In article <275ubbINNp05@uwm.edu>, pachner@csd4.csd.uwm.edu (Thomas Jay Pachner) wrote:
>
> I am new to Amateur Radio and was curious to who a TNC works? Is it possible
> to modify an external modem to become a TNC?
>
> What is an inexpensive TNC that would be good for someone to begin on?
>
About the only dissappointment I have had in amateur radio is that the kits or commercial gear is so cheap that building your own makes almost no sense. That said, I had considered building my own TNC, or at least a modem that I could then drove with my computer. The reason I did not was that I would have to write the software and it would tie up my computer. The software would not be that simple, since TNC's should be polite to other users and digipeating is expected. When I found out a TNC could be had for $120 that supported it's own mailbox of 8k at that price, and when I heard all that I would be missing by taking the months it would take to put my own machine together I put down the money and bought one.

Now, if you do want to make your own TNC, consider using one of the MOtorola modem chips. You can buy a v.23 modem which will make the right signals for packet, and motorola also has a chip that runs asynchronous to synchronous and vice versa. Those two chips would make a nice start on a TNC. You will have to pay attention to the modulation scheme, which is NRZI, but that is available in the ARRL handbook, and is documented in the AX.25 standard.

Best of luck!
Steve Holland KD4TTC (Another recent licensee)

285. Re: Used Micors & Exec IIs

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-15 15:18:25 UTC
From: don@genroco.com
Message-ID: <1993Sep15.151825.7483@genroco.com>
Source record: 51574

>A few questions about these radios, if I may. What's the approximate
>power output?

They come with various power outputs. 45, 60, and 90/110 watts are
typical for the VHF units (the only ones I am familiar with).

>How many frequencies/crystals can be installed at one
>time?

The VHF units come with either 4 channel or 8 channel capability.
There are separate crystals required for receive and transmit.

>Are there desireable options/variations to look for, less
>desireable models, etc?

Some of them (most of them?) come with PL capability. Some have
complex options like Digital PL and DVP that require lots of work to
remove. Others are quite simple to modify and use.

>Is there a business that sells/resells these,
>perhaps with a warranty?

Don't know of any.

>Is there any readily available info about
>using these units for amateur use, what to expect/watch for, etc.?

There are some mods lists on various packet BBS systems that deal
with some of the mods. A manual is a must. You cannot do much with
these without a manual. The manual will tell you what mods, if any,
are required to change the frequency range to the amateur
frequencies (they come in several frequency ranges in the VHF
range).

Hope this helps a little. I am working on modifying two of these
right now (never done it before). They are somewhat complicated
by the fact that they have the DVP units on them, but the trouble
will be worth it. They are 110 watt units with good ears.

Donald D. Woelz, K9GR Office Phone: 414-644-8700
GENROCO, Inc. K9GR @WB9TYT.#MKE.WI.USA.NOAM
205 Kettle Moraine Drive North k9gr@k9gr.ampr.org [44.92.1.48]
Slinger, WI 53086 U.S.A. don@genroco.com

286. Re: Can you build a TNC?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-15 16:16:09 UTC
From: jvp@tools1.ee.iastate.edu
Message-ID: <jvp.748109769@tools1.ee.iastate.edu>
Source record: 51573

In <CDE9Ew.n98@hawnews.watson.ibm.com> pcr@vnet.ibm.com (phil reed) writes:

>If you see advertisements or messages referring to a 'Baycom' TNC, then you
>just get the modem. You need to hook it to a PC, and the PC does all the
>software work. There are several out there, but they all use a PC (or in
>some cases a Commodore 64) in place of the dedicated TNC processor.

The same is true for the Macintosh. The PacketMac modem is a packet radio
modem that connects to your Mac's serial port (and is powered by it).

>I've seen Baycom-style TNCs in the $50-60 range, but MFJ sells their TNC-2
>clone for $120. So, what you get depends on how poor you feel and if you
>have a PC sitting around.

The PacketMac modem is available in kit form for $30, and completed
(but not in a case) for $45.

See the October 1992 issue of '73 Amateur Radio Today for more details.
Dexter (the designer/supplier) has moved to Colorado, so if anyone's looking
for him, I can give you his new address/telephone. His e-mail address is still
francis4@applelink.apple.com.

--
+---+
| Jim Van Peursem - Dept of EE and CprE - Iowa State University |
| Ames, IA 50011 - internet: jvp@iastate or tools1.ee.iastate.edu |
+---+

287. SunOS 4.1.3/3C/Solaris AX.25 Driver

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-15 18:29:28 UTC
From: stuart@jane.sas.upenn.edu
Message-ID: <147290@netnews.upenn.edu>
Source record: 51580

Recently I posted a message to rec.radio.amateur.packet asking about a TCP/IP driver for the Sun IPC/Classic/LX running 4.1.3/4.1.3C/Solaris. I was looking for something that was a loadable module.

While being told that there is something for download from ucsd.edu which is kernel configurable, and works under 4.1.3, I am still looking. I am reposting to this news group, as I was told that all rec.radio.amateur.packet stuff is now here.

thanks,

stuart, N3GWG
stuart@jane.sas.upenn.edu

288. Baypac modem-DJ F1t-resistor value

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-15 18:34:18 UTC
From: mtrail@violet.berkeley.edu
Message-ID: <277n7a$o4f@agate.berkeley.edu>
Source record: 51575

Hi, packeteers. I'm having trouble activating the PTT on my
Alinco DJ F1t/tigertronics baypac modem. I've installed the little
shunt on the modem that activates the 3.0k ohm resistor that's
supposed to bring the mic line to ground, but the rig will not
transmit unless I manually depress the PTT (very inefficient!).
Does anyone have experience with other resistor values,
such as 2K? Should I solder a resistor between the yellow and
red wires into the mic input? Also, I'm getting a 580 dual
bander soon. Anyone had any experience on this particular problem
with that rig?
Thanks, from a very inexperienced packeteer.
Matt KN6CR

289. Re: Can you build a TNC?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-15 18:38:11 UTC
From: nsyslaw@straylight.acs.ncsu.edu
Message-ID: <1993Sep15.183811.3096@ncsu.edu>
Source record: 51583

Thomas Jay Pachner (pachner@csd4.csd.uwm.edu) wrote:
: I am new to Amateur Radio and was curious to who a TNC works? Is it possible
: to modify an external modem to become a TNC?

: What is an inexpensive TNC that would be good for someone to begin on?

We've already had the discussion on TNC operation, so I'll jump in with a simple recommendation.

I've recently bought a Kantronics KPC-3 (cheaper than the MFJ TNC-2 clone, at only $105 (though that was a hamfest price, they run about $115 mail-order)

It has a 23 command newuser mode, supports KISS mode, KPC-2 command mode (KAM) does VHF wefax and a few other things I haven't gotten to yet. It comes with a minimal program (pacterm) which is barely useful, but works well with Lan-Link (which is shareware). I would assume there are Mac programs that could be found to use with it also. Oh yea, in it's "normal" mode the command set expands to about 130 (?) commands and it comes standard with 32K memory, expandable to 512K. Supposedly it will run for several hours on a standard 9-volt battery, as well. I haven't tried this, so I don't know it by experience.

If you really want to know the history of packet, the ARRL book "Gateway to Packet Radio" spends a great deal of pages going all through the history and the development of the TNC and AX.25 protocal. It's not overly technical, designed mostly for the beginner, but it does have some non-technical descriptions of the TNC and it's various functions and components.

+---+
Lou Williams (nsyslaw@acs.ncsu.edu)	Amatuer Radio: KE4ARM
Unix Systems Programmer	Phone: (919) 515-2794
NCSU Administrative Computing Services	FAX: (919) 515-3787
+---+
| Ack! Thpppppfffffft!!!! -Bill The Cat. |
+---+

290. 9600 baud fsk tone pair frequencies, wat are they?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-15 18:44:26 UTC
From: bmm1@freenet.scri.fsu.edu
Message-ID: <199309151843.AA139365@freenet.scri.fsu.edu>
Source record: 51576
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.space

Does anybody know the tone pair frequencies for 9600 baud fsk? I am going to modify a couple of radios for 9600 baud and would like to feed the pure tones through on the bench and see what works best. Also any tips about 9600 baud modifications would be greatly appreciated. And one more thing, does anyone know what frequencies are used for terrestrial 9600 baud fsk packet?
--

291. What is Clover?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-15 18:55:44 UTC
From: davidar@microsoft.com
Message-ID: <1993Sep15.185544.23369@microsoft.com>
Source record: 51581

Recently I asked Gary what Clover was and got this response.
I thought I would share it here.

Dave

From: Gary Coffman <netmail!ke4zv!gary>
To: David Arnold

> Thanks. So Clover is strictly a modulation scheme optimized for Radio
> designed and patented by HAL (some company I presume). What kinds of
> effective throughput? How much does the DSP board cost? I presume if
> you had the board, you would need AX.25 in software on your PC (that's
> OK). This doesn't sound very good for HAM work because of the
> proprietary nature. Aren't we doing 56K bps in our packet networks?
> If so, is Clover better than this?

I think Ray Petit, the guy who designed coherent CW, is the designer
of Clover. He sold the manufacturing rights to HAL. HAL is *the*
RTTY company. They dominate the commercial world and make the best
high end amateur equipment. They have brought out several HF packet
products, but didn't have a real winner until they bought the rights
to make the Clover system. On a good channel, Clover has an effective
throughput of 600 bits/sec, on a horrible channel with fading and
interference it still has a throughput of 50 bits/sec. All this in
a maximum bandwidth of 400 Hz. The system costs $995 from HAL and
includes the hardware, firmware, and the software required to do
automatic message forwarding. They also sell a turnkey system in
the commercial market that includes the PC, and data encryption.
I think the Clover specs are published, it's the implementation
that's patented.

Yes we run 56 kb RF modems at UHF, but the advantage of Clover
is that it's designed for the HF environment. While the GRAPES
modem has much higher throughput, it's range is limited to the
30 to 60 miles of a UHF signal. Clover can span a continent in
a single hop. We'd need a 100 optimally sited GRAPES sites to
do the same thing. As you know, each hop of AX25 digipeating
halves your effective throughput. So divide 56000 by 2^100 and
you only get 4.4E-26 bits/sec. Not so good. :-)

There are ways around that of course. You could run full duplex
links with regeneration and use a different error detecting
protocol than strict frame by frame ARQ. Then you'd have the
full 56 kb throughput, though with a fixed delay. The problem
is getting the cooperation for those 100 sites from amateurs
all across the country. We find it difficult to find people

to site and maintain 56 kb nodes just in the state of Ga.
With Clover, you only need two cooperating sites to span
a continent. That's much easier to do in practice.

Gary

292. DSP-12 users on internet

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-15 19:13:44 UTC
From: bmm1@freenet.scri.fsu.edu
Message-ID: <199309151912.AA123697@freenet.scri.fsu.edu>
Source record: 51577

Are there any DSP-12 users ou there on the internet? I know there is a
DSP-12 users group but the only contact I have for most of them is a phone
number. I suspect that a good contact would be on the satellites themselves
however I am not to the point of having reliable satellite communications.
I do have internet access. If enough users are interested I *might*
volunteer to manage a mailing list.

Bruce. N4USH. bmm1@freenet.fsu.edu
--

293. HAPN packet, what is it?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-15 20:02:22 UTC
From: bmm1@freenet.scri.fsu.edu
Message-ID: <199309152002.AA51185@freenet.scri.fsu.edu>
Source record: 51578

I recently purchased a DSP-12 which has a mode called HAPN packet. Since the DSP-12 is in a constant state of software development the manual doesn't list this mode. Does anyone know what HAPN packet is?
--

294. DSP-12 users on Internet

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-15 20:06:32 UTC
From: bmm1@freenet.scri.fsu.edu
Message-ID: <199309152005.AA62325@freenet.scri.fsu.edu>
Source record: 51579
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.space

Are there any DSP-12 users ou there on the internet? I know there is a DSP-12 users group but the only contact I have for most of them is a phone number. I suspect that a good contact would be on the satellites themselves however I am not to the point of having reliable satellite communications. I do have internet access. If enough users are interested I *might* volunteer to manage a mailing list.

Bruce. N4USH. bmm1@freenet.fsu.edu
--

295. Re: 2-m homebrew packet rig?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-16 03:21:50 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1993Sep16.032150.10590@ke4zv.atl.ga.us>
Source record: 51584

In article <SBROWN.93Sep15085034@charon.dseg.ti.com> sbrown@charon.dseg.ti.com (Steve Brown) writes:
>In article <1993Sep14.160053.26686@newsgate.sps.mot.com> Chris Terwilliger <a229aa@email.sps.mot.com> writes:
>> In article <1993Sep12.134230.19253@ke4zv.atl.ga.us> Gary Coffman,
>> gary@ke4zv.atl.ga.us writes:
>>
>> >For 9600 baud, the Micor is fairly trivial to convert,
>>
>> please elaborate...
>
>Yes, please elaborate _on the net_. I tried to send you a message every
>way I could think of and got kickbacks.

Well (aaarrrgg) my Motorola manual is out on loan so I can't give you a part number by part number mod sheet. It's basically simple though. You just disconnect the audio amp from the modulator and connect your TNC output instead, and you disconnect the audio amp from the discriminator and connect your TNC instead. It can't get much simpler than that.

Since I *do* have my GE manual handy, I'll give you the method for making a UHF Exec II or MVP work on 9600 baud. It isn't so simple. On the limiter detector board, U602 is the limiter detector IC. Pin 1 is the audio output, but we don't want to take our signal directly from there, we'd load it too much. Instead we take it at J601 pin 2. That's isolated by a 180k resistor from U602.

Now we'll only have 0.2 volts of signal here, and that isn't enough to drive our TNC. We could try to take the signal from the emitter of Q603 but we'd have bandlimited de-emphasized audio, not good. So we outboard an OPamp and set it for a gain of 5, just use a 900k feedback resistor in conjunction with the 180k resistor already in the radio. This will give us a volt to the TNC which will make it happy. Note that the signal at J601-2 is offset +0.35 volt DC so we have to null that voltage with a bias pot in the non-inverting input to our OPamp.

All is not well yet, however. The radio uses a 4 pole crystal filter in the IF which is too narrow for our purposes at +/- 7 kHz. We've got to widen this a bit. There are several ways to approach this problem, but the easiest is to solder a gimmick capacitor across pins 1 and 3 of FL502 and twist for the desired response. FL502 is the filter nearest J502, the +10 volt power connection. Solder two 1 inch insulated hookup wires, one to pin 1 and the other to

pin 3. Now twist these tightly together for the desired response, about +/- 10 kHz response. This is easiest done with a sweeper. You may need to touch up C504 and L503 for flattest response. Cut off any excess lead length on the gimmick and put a touch of glypt on it to hold it in place.

Now the easy part is over. We have to modulate this thing with our 9600 baud signal. The modulator is a classic variable reactance phase modulator. That won't do for our purposes so we're going to turn the radio into an FM modulated transmitter. First we're going to operate on our Icom (channel element) by removing C1. That's the square green bypass capacitor just below the piston trimmer. The varactor in the Icom is too small to give us the swing we need, so we rob the varactor from the phase modulator, CR180, and parallel it across the varactor in the Icom. Now we have to cut the trace going to XY101-4, the Icom socket on the exciter board. Be sure when you cut the trace that you cut *after* the connection to P902-3 or you'll lose your receiver temperature compensation.

Ok, now we need about 2 volts of signal to drive the varactor in the Icom, and we want to keep our compensation voltage too which will be in the 4.0-6.0 volt range depending on temperature. To do that, we're going to use an OPamp as a voltage summer. Feed the TNC audio, 1 volt, and the compensation voltage to the inverting input of the OPamp. Take the audio through a 100k resistor and take the compensation voltage via a 400k resistor connected before the trace cut. Use a 50k feedback resistor. Use another section of the OPamp as an inverting unity gain amp with a 2.5 volt positive offset in the non-inverting input. This gets the compensation voltage going back in the right direction and biases the varactors properly. You should now have a 4.5-5.5 volt positive DC output with a 2 volt symetrical audio signal riding on it. Note that we've halved the compensation voltage swing because we've doubled the amount of varactor. Now connect the output of the OPamp to the XY101 side of the trace cut. You should be able to get 4 kHz deviation.

There *is* another way, but it puts pre-emphasis on the signal. That's to just accept the phase modulator and put the audio in on the Channel Guard input, P902-9. It takes a *lot* of signal though to get 4 kHz deviation. You'll still need the OPamp. If you do this, you'll want to add a de-emphasis network in the receive section. You can do this by adding a capacitor in the feedback section of the receive OPamp to give a 6 db per octave roll off. Don't try to use the speaker output. It's bandlimited as well as de-emphasized. That won't work well at all. The modem operation will be compromised, but may work if others in your area are using pre-emphasis/de-emphasis in their radios. I don't recomend it, but it is easy to do.

Gary
--
Gary Coffman KE4ZV |"If 10% is good enough | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | for Jesus, it's good | uunet!rsiatl!ke4zv!gary
534 Shannon Way | enough for Uncle Sam."| emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -Ray Stevens |

296. Re: Used Micors & Exec IIs

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-16 07:05:13 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1993Sep16.070513.11302@ke4zv.atl.ga.us>
Source record: 51585

In article <748051212.AA00123@afarm.uucp> Burt.Kaufman@f40.n382.z1.fidonet.org (Burt Kaufman) writes:
> -=> Quoting Gary Coffman to All <=-
>
> GC> You can find used Micors and
> GC> Exec IIs at hamfests in the $50-$90 range all day long. You can't build
> GC> a radio of this quality for that amount of money. Finding the parts
> GC> alone is an exercise in futility. These radios use very good filters
> GC> and inductors made especially for Motorola and GE. They aren't
> GC> commodity items.
>A few questions about these radios, if I may. What's the approximate
>power output? How many frequencies/crystals can be installed at one
>time? Are there desireable options/variations to look for, less
>desireable models, etc? Is there a business that sells/resells these,
>perhaps with a warranty? Is there any readily available info about
>using these units for amateur use, what to expect/watch for, etc.?

The power out varies by model from 20 watts to 110 watts. Either radio is available with 4 or 8 frequency decks, but a single frequency radio is all you need for packet. You should stay put on your LAN frequency. The main thing you have to watch out for with the VHF Micors is that some of them are so far out of the 2 meter band that you have to do some serious part changing to bring them in. The UHF radios aren't a problem. The GEs aren't a problem at all. There's a fellow out in Montana who advertises in the two way magazines, but he offers no warranty. You'll do better buying at a fleamarket where you can handle and inspect the radio yourself. You can find GE manuals at the fleamarkets too, but Motorola manuals rarely show up there. You can still buy Motorola manuals from Motorola. Look for a radio that's clean inside. Don't worry about the outside, they all look beat up and rusty. These were originally trunk mount radios. If you ever intend to use one for voice, be sure and find a set of cables and heads. You won't find the plugs at the dime store.

I'm very fond of the GE radios. I think they're better built than the Micors, though you're sure to get debate on that subject among hams. Motorola radios sell for more than the GEs. GE is out of the business, but Ericsson has picked up the line so you can still buy spare parts, and they won't rob you either. Of course Motorola still sells spares for their radios as well. They're mighty proud of their parts though, it'll be cheaper to buy two or three radios so you can swap out modules if necessary.

Before you buy a radio, find a manual and study it. The GE manuals list the "combo" numbers and what they mean. That will allow you to

identify any radio you find as to it's frequency range, output power,
and accessory groups. Motorola manuals give you similar information.
That's important because they all look alike and you really need to
be able to decypher the numbers to know what you're buying.

Gary

--
Gary Coffman KE4ZV |"If 10% is good enough | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | for Jesus, it's good | uunet!rsiatl!ke4zv!gary
534 Shannon Way | enough for Uncle Sam."| emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -Ray Stevens |

297. Re: HAPN packet, what is it?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-16 08:00:05 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1993Sep16.080005.11619@ke4zv.atl.ga.us>
Source record: 51586

In article <199309152002.AA51185@freenet.scri.fsu.edu> bmm1@freenet.scri.fsu.edu (Bruce M. Marshall) writes:
>
>I recently purchased a DSP-12 which has a mode called HAPN packet. Since the
>DSP-12 is in a constant state of software development the manual doesn't
>list this mode. Does anyone know what HAPN packet is?

HAPN, Hamilton Area Packet Network. It's the group in Hamilton Ontario
who run 4800 baud modems.

Gary

--
Gary Coffman KE4ZV |"If 10% is good enough | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | for Jesus, it's good | uunet!rsiatl!ke4zv!gary
534 Shannon Way | enough for Uncle Sam."| emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -Ray Stevens |

298. Re: Packet on a Unix box?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-16 13:26:57 UTC
From: peter@globv1.hacktic.nl
Message-ID: <1993Sep16.132657.1519@globv1.hacktic.nl>
Source record: 51588

pjb@cco.caltech.edu (Paul J. Brewer) writes:

>A cure all for interfacing unix with packet is to buy a DOS box to use
>as a router/radio controller. Run Wg7j or ka9q nos on the dos box, and tell
>it to run SLIP for the connection back to the unix box. (your unix box does
>have a SLIP tcp/ip , doesn't it!?).

If said UNIX box has SLIP then another option comes in mind. One could also run KA9Q or JNOS under UNIX and connect it to it's own operating system by a simple null-modem cable. One port is connected to NOS and the other to the UNIX SLIP.

Maybe it's even possible to SLIP through a virtual terminal! Anyone out there who knows if this is possible? If so, how?

>This cures several problems:

> NOS on the PC is constantly being updated. it has all the latest
>drivers available (KISS TNC, SCC/DRSI, Gracilis, BAYCOM via packet driver,
>G8BPQ, etc...).

I use KISS TNC's anyway, because they are supported by 90% of the software and by any hardware platform that can do serial I/O.

> Some versions of unix ham software have a security hole. If someone
>sets mycall to root on the air, and connects to your unix station, they
>can becom e root on your unix box. ain't that nice?

NO! NO! NO! You are referring to Wampes. And you can't do that with Wampes. First it checks whether the call-sign is a valid call sign (does it have numbers at the right position, doesn't it have too many numbers, etc.). I can assure you that root isn't a valid call-sign. Invalid call-signs log in to the default user (you can set that with login defaultuser <userid>). On my system that means that the Wampes BBS is used as a shell. Try to hack that!

Second, you can control whether new accounts are automatically created or not (unknown users log on to the defaultuser account), the minimum and maximum user id's that are allowed for automatic created accounts, and the shell the'll get when the account is automatically created. If you make that the Wampes BBS program, then there is little to hack for those people. Any other program that can act like a shell, is also okay.

Third, Wampes can log every single character that goes out to incoming AX.25, NET/ROM or telnet logins. That is, if you enable this feature. A simple login logfiledir <directory> does just that. I used to check the log files once every day to see if someone was trying to do something nasty. (And yes, I know that someone who can crack the system can remove or alter log files.)

Fourth, Wampes does not give access to any TCP port unless you explicitly tell it to do so. That is, if you use the start tcpgate option. So you could for instance disable NNTP and SMTP traffic while enabling traffic to a MUD game. The drawback of this feature is that it only works for incoming traffic. It is for instance possible to route incoming NNTP traffic to the UNIX NNTP server, but the NNTP server cannot make outgoing connections. The only way to do that is to include a NNTP server in Wampes sources which can then make the connection. The tcpgate feature is also unusable for protocols like FTP that open a second port.

The only reason why I run a DOS JNOS box as a router is that it autojumps at AX.25 users when they connect and it has a userfriendly mailbox. Most people around here use SP or GP and don't know anything (really!) about protocols and other black magic. They don't understand that Wampes waits until it can decide which protocol to use. And UNIX totally confuses them, and they don't seem to learn. An added feature is that JNOS is a also a node program, which gives AX.25 users also NET/ROM and TCP/IP facilities (and vise versa), a feature that does not exist in Wampes, unfortunately.

The above is not to knock Wampes down or to praise it. Wampes is a nice piece of software, but so is every NOS version IMHO. :-) But I think that it's better to discuss it with the facts open on the table instead of letting the "rumour mill" do it's work.

>Having rth e PC be
>the router means using your unix's native tcp/ip and security.

Right, and then everyone can connect to every TCP port on your UNIX system and crack it from there. It looks to me like trading one possible hole for another...

>I'm not
>sure which version of the UNIX ka9q tcp/ip has this problem, or if it had
>been fixed. Just heard it in the rumor mill.

Yeah, the rumour mill. It's Wampes. JNOS, which is also availlable for UNIX (oh well, maybe I should say Linux) does not have such a "security hole". It runs just like JNOS under DOS.

> If you have SLIP access to the internet (via work or school) , you
>won't have to choose between accessing internet and being on amprnet. You
>can set up two SLIP interfaces on the nos box (one to go to the unix box,
>one to go to the telephone modem), the TNCS, and with the proper routing
>config on the nos box, access both internet and 44-net from the unix box.
>warning: this requires some care : see the ipaccess/tcp access commands in
>jnos for setting up proper security for this configuration. without proper
>security, this becomes a completely open internet/packet gateway.

>currently,
>only half-open gateways are legal (the ham must initiate the connection, not
>the guy on internet). you might not even want to run a gateway at all, and it
>is posible to hide this capability .

That is why I'm doing this kind of things on the CB (27MHz). Packet on CB is 100% legal in The Netherlands. And since it's a public band, the free speech stuff in the treaty of Rome fully applies. Hams on the other hand are rather restricted here with what they are allowed to transport (no political messages, no commercial stuff, no third party traffic, no offensive stuff, etc.).

I hope that you hams don't jump in on me for publicly stating that I'm a CBer. Some hams *hate* the CB. On the other hand I meet hams on the CB packet net every day, I guess not completely without reason. Anyway, you wouldn't want to scare away a future colegue who is studying hard to pay of his sins, would you??? ;-)

Groetjes,
Peter Busser
--
Linux, the choice of a GNU generation.

299. Motorla MC80 for packet ?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-16 13:59:42 UTC
From: johna@icsbelf.co.uk
Message-ID: <CDG9JI.wsL@icsbelf.co.uk>
Source record: 51587

Hi All,

I have a Motorola MC80 VHF FM radio that I want to use for packet. Has anyone any experience of tuning these radios onto 2m ? I have a manual for the radio but it seems that my TX layout is not the same as that of the circuit diagrams in the manual. Also I find that now I have tuned the RX it is as deaf as a post - any ideas. The radio originally operated around 150 Mhz according to the xtals that cam with it when I bought it. I do not want to mess with the TX until I have an idea of what I have to do.

I look forward to any and all replies !!!!

--

John Agnew, | johna@icsbelf.co.uk
ICS Computing Group Ltd, | ...!uknet!icsbelf!johna
Belfast (Northern Ireland) | Gi6IRL@GB7TED.GBR.EU [44.131.15.11]

300. MFJ 1270 TNC Realtime Clock

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-16 22:00:37 UTC
From: donrm@sr.hp.com
Message-ID: <CDGvt1.ECz@srgenprp.sr.hp.com>
Source record: 51590

I asked this question over on rec.radio.amateur.packet a couple of months ago with no answers...

Has anyone successfully installed the Dallas 1216E realtime clock "smart-watch/ROM socket" into the MFJ1270 TNC? I have the clock support PacComm PMS rom code, but can't get it to recognize the clock. PacComm can't offer any help.

Without dragging home a logic analyzer, does anyone have any ideas?

Don Montgomery, K6LTS
donrm@sr.hp.com

301. IP address coorindators

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-17 04:45:16 UTC
From: kd4cim@vulcan.com
Message-ID: <6L6Z0B1w165w@vulcan.com>
Source record: 51589

Hi,

I once had a file (sounds like Norwegian Wood from Beatles Rubber Soul)

with all the names, calls, BBS's addresses for the 44.xxx.xxx.xxx (aka Ham) IP coordinators for the various states. But alas, I had a HD FUBAR the other day and one of the files that was not on the backup contain the above mentioned info.

I would really like the entire list, but at the moment what I need most is the call, BBS of the coordinator in Tennessee. I need to refer someone to that person.

Thanks,

Oh, if someone has the entire list of US coordinators, pls post it. There may be others that need that info.

de Jerry

BHM AmprNet - kd4cim@kd4cim.ampr.org [44.100.113.19]
Packet Radio - KD4CIM @ KD4CIM.AL.USA.NA
Internet - kd4cim@vulcan.com

302. HAPN packet, what is it?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-17 14:39:00 UTC
From: steve.jones@canrem.com
Message-ID: <60.768.5731.0N183E14@canrem.com>
Source record: 51593

> I recently purchased a DSP-12 which has a mode called HAPN packet. Since the
> DSP-12 is in a constant state of software development the manual doesn't
> list this mode. Does anyone know what HAPN packet is?
> --

It's probably compatible with the 4800 baud board that the Hamilton
Amateur Packet Network guys sold.

Steve
* JABBER v1.1 * {COMMO} a new standard in telecommunications

303. Re: Packet on a Unix box?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-17 16:57:25 UTC
From: jvp@tools1.ee.iastate.edu
Message-ID: <jvp.748285045@tools1.ee.iastate.edu>
Source record: 51591

In <1993Sep16.132657.1519@globv1.hacktic.nl> peter@globv1.hacktic.nl (Peter Busser) writes:

>If said UNIX box has SLIP then another option comes in mind. One could also
>run KA9Q or JNOS under UNIX and connect it to it's own operating system by
>a simple null-modem cable. One port is connected to NOS and the other to the
>UNIX SLIP.

Heck, why mess with the cable? Have the two processes talk through
sockets or pipes.

>Maybe it's even possible to SLIP through a virtual terminal! Anyone out there
>who knows if this is possible? If so, how?

Why slip? Go full tcp/ip through a socket to another process.

--
+---+
| Jim Van Peursem - Dept of EE and CprE - Iowa State University |
| Ames, IA 50011 - internet: jvp@iastate or tools1.ee.iastate.edu |
+---+

304. packet radio & distance education

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-17 18:34:40 UTC
From: bapgar@uoguelph.ca
Message-ID: <27d000$6kb@nermal.cs.uoguelph.ca>
Source record: 51592

I have read at least one article which discusses the use of packet radio in Africa and elsewhere to support or provide distance education programs. I am interested in knowing if any reader(s) are aware of, or participating in such initiatives or programs, and further if any involve radio amateurs in either hosting nets or relaying.

I have a _little_ background in the technology (enough to handle some technological concepts). I am researching farmer/rural access to agricultural information through telecommunications technologies and would like to include packet/digital radio in my overview.

Additionally -- since packet radio involves transceiving, what limitations does this impose for those who would like to 'receive' packet radio broadcasts, but do not have digital operator's licencing? Several years back I heard that because a packet requires echoing back from the receiver, the receiver itself must therefore also be a transmitter, and in North America at least, the DOC and FCC would require any radio transmitter to be appropriately licenced? Or is in fact, as I have also heard, the _operator_ who must be licenced, not the equipment, therefore implying that as long as a licenced operator is in the room (or on site), a packet-radio transceiver can be 'used' by other parties in the room?

Pardon my inappropriate use of terms or misunderstanding of concepts!

Thank you.

Bill Apgar <bapgar@uoguelph.ca>

305. Re: Packet on a Unix box? We don't want MSDOS

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-17 21:16:48 UTC
From: jdc3538@ultb.isc.rit.edu
Message-ID: <1993Sep17.211648.12030@ultb.isc.rit.edu>
Source record: 51594

Back to the original question:

Is there any Unix packet software available?
Is it for modem-only TNC's (like Baycom) or smart TNC's?

73...Jim
N2VNO

306. Re: Packet on a Unix box? We don't want MSDOS

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-18 02:40:01 UTC
From: rich@mulvey.com
Message-ID: <930917.224001.6n3.rusnews.w165w@mulvey.com>
Source record: 51596

jdc3538@ultb.isc.rit.edu (J.D. Cronin) writes:

>
> Back to the original question:
>
> Is there any Unix packet software available?
> Is it for modem-only TNC's (like Baycom) or smart TNC's?
>

As I said earlier in this thread - yes, I'm running WAMPES on my Linux box, over an MFJ MCP.

- Rich

--
Rich Mulvey Amateur Radio: N2VDS 787 Elmwood Terrace
rich@mulvey.com "Ignorance should be painful." Rochester, NY 14620

307. Re: Packet on a Unix box?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-18 03:21:16 UTC
From: gsmlrn@gsm001.mendelson.com
Message-ID: <1993Sep18.032116.25330@gsm001.mendelson.com>
Source record: 51595

In article <1993Sep16.132657.1519@globv1.hacktic.nl>
peter@globv1.hacktic.nl (Peter Busser) writes:

>That is why I'm doing this kind of things on the CB (27MHz). Packet on CB is
>100% legal in The Netherlands. And since it's a public band, the free speech
>stuff in the treaty of Rome fully applies. Hams on the other hand are rather
>restricted here with what they are allowed to transport (no political
>messages, no commercial stuff, no third party traffic, no offensive stuff,
>etc.).

I posted a note a few days ago concerning automaticaly forwarding
Internet mail from UNIX via ethernet to a pc running NOS and then out
via ham radio.

This is actually a very simple thing for me to do, once I was able to
establish a connection between NOS and the UNIX machine.

However, the replies I received told me that I would be legaly
responsable for EVERY message I forward. Since I do not want to
monitor every message before it gets forwarded and I especially don't
want to get fined if some lid sends a message containing dirty words,
obscene imagery, or (horrors!!!) a commercial message, I decided to
give it up. :-(

You should consider yourself lucky that you can use any band freely
for packet.

>I hope that you hams don't jump in on me for publicly stating that I'm a CBer.
>Some hams *hate* the CB. On the other hand I meet hams on the CB packet net
>every day, I guess not completely without reason. Anyway, you wouldn't want to
>scare away a future colegue who is studying hard to pay of his sins, would
>you??? ;-)

If I were in your country I would use CB for packet. IMHO It makes no
sense to use the ham bands there.

>Groetjes,
>Peter Busser
>--
>Linux, the choice of a GNU generation.

73,

Geoff.

--
Geoffrey S. Mendelson N3OWJ
(215) 242-8712

gsm@mendelson.com or uunet!gsm001!gsm

308. Re: Packet on a Unix box? We don't want MSDOS

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-18 15:15:23 UTC
From: jim@n5ial.mythical.com
Message-ID: <1993Sep18.151523.7369@n5ial.mythical.com>
Source record: 51600

In article <1993Sep17.211648.12030@ultb.isc.rit.edu>
jdc3538@ultb.isc.rit.edu (J.D. Cronin) writes:

>Back to the original question:
>
>Is there any Unix packet software available?
>Is it for modem-only TNC's (like Baycom) or smart TNC's?

Well, I'm not sure if this is what you're asking or not (I missed the first part of this thread), but here goes....

I'm the author of a shareware program called KAMterm. It's a host mode terminal program for Kantronics TNCs, and currently only runs under dos. I am working on a port to UNIX (will be on Linux first, since that's what I run here). Eventually, I hope to have this worked out for UNIX in general.

There are lots of issues here, though, that need to be worked out. First, it's either binary-only distribution, which means I have to have access to each type of machine it'll be available for, or I end up releasing the source code...which is something I'm not sure if I want to do (what happens to the copyright when you make the source publicly available?).

And, of course, there's a lot of work left to do in porting the beast.... No matter what, I don't expect to have it done in the next couple of months, at least. Before I even start on the port, I'm doing a total re-structuring of the source for KAMterm....It'll be much more streamlined (and, I think, tighter, smaller, and faster) when it's all done, but it's taking time.

Questions? Comments? Suggestions? I'd love to hear them....
--jim

--
#include <std_disclaimer.h> 73 DE N5IAL (/4)
-------------------------< Running Linux 0.99 PL10 >--------------------------
INTERNET: jim@n5ial.mythical.com | j.graham@ieee.org ICBM: 30.23N 86.32W
AMATEUR RADIO: (packet station temporarily offline) AMTOR SELCAL: NIAL

E-mail me for information about KAMterm (host mode for Kantronics TNCs).

309. Re: Packet on a Unix box?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-18 18:36:35 UTC
From: peter@globv1.hacktic.nl
Message-ID: <1993Sep18.183635.3523@globv1.hacktic.nl>
Source record: 51597

jvp@tools1.ee.iastate.edu (Jim Van Peursem) writes:

>In <1993Sep16.132657.1519@globv1.hacktic.nl> peter@globv1.hacktic.nl (Peter Busser) writes:

>>If said UNIX box has SLIP then another option comes in mind. One could also
>>run KA9Q or JNOS under UNIX and connect it to it's own operating system by
>>a simple null-modem cable. One port is connected to NOS and the other to the
>>UNIX SLIP.

> Heck, why mess with the cable? Have the two processes talk through
>sockets or pipes.

I'm not talking about two processes per se. I'm talking about connecting a
UNIX machine to a packet radio TCP/IP network in general. And not one way,
like Wampes, but two way, and without using an extra machine as a router. And
with two way I mean that I can type ftp blah.ampr.org on the UNIX shell prompt
and get a connection through the packet radio TCP/IP network.

>>Maybe it's even possible to SLIP through a virtual terminal! Anyone out there
>>who knows if this is possible? If so, how?
> Why slip? Go full tcp/ip through a socket to another process.

What do you mean with "full TCP/IP through a socket"? Is it possible to open
a socket in such a way that when I say: "ftp aa1aaa.ampr.org" to my UNIX shell,
that I am able to really FTP to and from that site?

Groetjes,
Peter Busser
--
Linux, the choice of a GNU generation.

310. Re: Packet on a Unix box? We don't want MSDOS

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-19 00:11:21 UTC
From: chris@kd3bj.uucp
Message-ID: <CDKr6x.vq@kd3bj.uucp>
Source record: 51602

jdc3538@ultb.isc.rit.edu (J.D. Cronin) writes:

>Back to the original question:

>Is there any Unix packet software available?
>Is it for modem-only TNC's (like Baycom) or smart TNC's?

I have dozens of Unix packet programs for download on my BBS.
All shapes sizes and flavors. Take your pick.

The KD3BJ Usenet BBS +1 215 257 2744
--
73 de KD3BJ (Chris Nadovich, chris@flam.com)

311. ZL DATA NEWS 1/2

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-19 00:40:46 UTC
From: carl@codewks.nacjack.gen.nz
Message-ID: <N3g60B1w165w@codewks.nacjack.gen.nz>
Source record: 51598

```
From : ZL1AVY
To : NEWS @NZ
Type/status : B$
Date/time : 11-Sep 03:21
BID (MID) : 7934_ZL1AB
Message # : 7934
Title : ZL DATA NEWS SEPT 12 1993 1/4

-----------------------------------------------------
DATA DATA DATA DATA DATA DATA DATA DATA DATA DATA DATA
DATA DATA ................................ DATA DATA
DATA DATA . . DATA DATA
--------- . THE WEEKLY NEWSLETTER OF . ---------
NEWS NEWS . THE ZL DATA GROUP . NEWS NEWS
NEWS NEWS ................................ NEWS NEWS
NEWS NEWS NEWS NEWS NEWS NEWS NEWS NEWS NEWS NEWS NEWS
-----------------------------------------------------
TRANSMITTED BY ZL1AVY AUCKLAND SEPT 12 1993

THIS IS A WEEKLY UNOFFICIAL BULLETIN OF NEWS AND VIEWS FROM ZL
AMATEURS. IT DOES NOT REPRESENT AN OFFICIAL VIEWPOINT, AND ALL
OPINIONS ARE THOSE OF THE CONTRIBUTOR.

DATA THROUGHPUT ON PACKET - a difficult concept
---------------------------------------------- from ZL1DDL

The BBS will now take some time to process our demand. If the BBS
satisfies the usual specifications, it will queue an acknowledge packet
immediately. It would be about 660 ms long, including the waiting times
(free channel, no other packets in the queue). Within a second, the BBS
will also queue a reply packet for transmission. With a bit of luck, it
is ready for transmission immediately after the acknowledge packet. The
info packet will usually contain 256 bytes of data plus the 20 bytes
for the header and so on. Overall, it will be about 2650 bits long,
which take about 2200 ms to transmit.

Note that this time there is no waiting time, as the info packets is
transmitted in one go together with the acknowledge packet (some
systems actually do without an acknowledge packet). So the whole
RESPONSE TIME is 700 ms plus 660 ms plus 2200ms equals 3560 ms.

The response time is the time between the command and the reception of
the response. It is ONE throughput measure, but it's usually the less
important one.
```

The other one is the throughput you get during unidirectional data transfer, i.e. when you are downloading a bulletin or file. Here, you get under ideal conditions, assuming the standard MAXFRAME of 3 (don't use more on a shared channel, otherwise you'll prompt all those other impatient stations out there to poll after your transmission), three full info packets followed by an acknowledge packet.Hence, your blocks consist of 500 ms (DWAIT and TXDELAY of the sending station) plus 3 times 2200 ms (the infopackets) plus 660 ms (your acknowledge) equals 7760 ms of transmission, assuming an immediate acknowledge and immediate resumption of info packet transfer after an acknowledge has arrived. Here you've transferred 3 times 256 bytes equals 768 bytes equals 6144 bits in 7760 ms, which is a bit rate of just over 790 bits or almost 99 bytes per second. That's as good as it can get,unless you want to use parameters that disadvantage other users when they pop up.

Sounds complicated ? Well - that's as easy as it gets, folks. But it's not quite as hopeless as you may have thought. Mind you - all this is under ideal conditions. But it already shows a few ways to actually improve the throughput :
* use a higher baudrate
* use rigs with fast TX/RX switching times
and preferably software squelch systems

It should be clear from the above figures where improvements could be made most easily. For example, it is better to start at the BBS or digipeater with installing transceivers with low TX/RX switching times as it will have a more effect than painful upgrades for every user's rig. It should also demonstrate that a slow, possibly relay-operated transceiver isn't quite the ideal rig for 9600 Bd packet.

(continued next page)

--- End of message #7934 to NEWS from ZL1AVY ---

From : ZL1AVY
To : NEWS @NZ
Type/status : B$
Date/time : 11-Sep 03:22
BID (MID) : 7935_ZL1AB
Message # : 7935
Title : ZL DATA NEWS SEPT 12 1993 2/4

In fact, this is only where things start. Anybody could have guessed that. But now let us complicate the situation slightly: let's add another user on the same frequency. At this stage let's assume the other user operates a similar setup, i.e. has the same timing,output etc. . Let's also assume that your signals are equally strong at the BBS. Another simplifying assumption is that your stations can hear each other, and that both of you 'do the same thing', i.e. down loading a long bulletin or so (as opposed to the 'one station active - the other having an idle connect' - situation).

The first consequence is that you will now have to SHARE your airtime with the other station. This will, at first glance, cut your throughput by about HALF. In fact, it will probably be less than that.

(I have been advised by ZL1UOC that there is a bug in my understanding of AX.25 regarding bit stuffing. In fact, an extra 0 bit is only inserted after more than 5 1 bits, not after every fifth bit.)

(to be continued)

SELCAL USERS : May have noticed that the ZL1-AMW system is currently running without any formatting , no c/r or l/f's - I'm sure that Alan will correct this ASAP. Messages can still be understood. Any comment on the 'new abbreviated' intros to Alan please - de Doug

A Serial Interface
------------------ by Henry ZL1AAN

Having illustrated parallel interfacing with some nostalgia on the SINCLAIR SPECTRUM, I will now talk about a serial interface.

Because of improved noise immunity for one, a serial interface is chosen most frequently over distances greater than the length of the average office desk (about 1.5 m), where it most likely will control a printer. The protocol for wiring the serial cable will be derived from the RS232 standard.

This standard was set up to regulate the connection of equipment to a modulator-demodulator (MODEM), to stop people from connecting directly to the phone line. It describes a 25 wire connection between Data Terminal Equipment and Data Communication Equipment (DTE and DCE).Nobody that I know of employs the full standard. Printer manufacturers for one do their own thing, so you cannot use some other makers' cable.

In communications such as I have seen, things seem to settle down to a 9-wire configuration, as used on the IBM-AT.

Your computer will hopefully be Data Terminal Equipment, and have a male 25-pin or 9-pin D-type socket. Conversely, the modem SHOULD be Data Communication Equipment, and have a female 25-pin or 9-pin D-type socket: The PacCommm Terminal Node Controllers are DCE, but have a MALE 9-pin D-type socket, so there.

Even equipment with 25-pin sockets often uses 9 wires for serial communication. In fact, there are circumstances where you can get away with three wires.

(continued next page)

--- End of message #7935 to NEWS from ZL1AVY ---

--
carl@codewks.nacjack.gen.nz (Carl Trommel)
The BBS Works -- +64 9 630 7739 NZL New Zealand's Oldest BBS

312. ZL DATA NEWS 2/2

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-19 00:48:24 UTC
From: carl@codewks.nacjack.gen.nz
Message-ID: <DFH60B2w165w@codewks.nacjack.gen.nz>
Source record: 51599

From : ZL1AVY
To : NEWS @NZ
Type/status : B$
Date/time : 11-Sep 03:24
BID (MID) : 7936_ZL1AB
Message # : 7936
Title : ZL DATA NEWS SEPT 12 1993 3/4

A 3-wire connection is called a NULL MODEM. (The numbers that I use in diagrams will assume the use of 9-pin sockets.)

Computer << Read pin 2 ---------- pin 2 Read >> Modem
(DTE) << Write pin 3 ---------- pin 3 Write >> (DCE)
Signal Ground 5 ---------- Pin 5 Signal Ground

The designations 'Read' and 'Write' are applied to DTE, so try to ignore that your modem writes on the 'Read'-line and vice versa.

With such a minimal system, Start- and End-characters have to be used to stop both computer and modem from sending at the same time. It is called software control. In the PacComm Tiny-2 the menu says 'XFLOW ON' (literally: Transmit-Flow),when you switch it on for the first time. It's Start-character (in the menu: XON) is Hexadecimal 11, meaning factors of 16 are used instead of factors of 10. It's End-character (in the menu: XOFF) is Hex 13.

These numbers do the same as pressing two keys on the keyboard at the same time, for typing beginnings and ends.

$11 is the same as (ctrl) Q (dollar,hash etc all mean 'hexadecimal')
$13 is the same as (ctrl) S (depending on who writes.)

You may prefer to configure your terminal software to insert these characters automatically. The alternative is to use extra wires for this control. In a future contribution I may talk about one way of 'hardware handshaking' as used on the 9-wire interface.

Best regards Henry ZL1AAN

Trouble contacting BBS
---------- from ZL1BF

At a recent Auckland Packet users meeting there was considerable discussion from some of those present on the apparent difficulty in accessing the BBS on 144.600 Mhz. I was experiencing some of the same problems, and in addition to the above, mention was made that the

SYSOPS would soon be measuring the FM deviation of users, I decided
that it was time to check my own before I got told about it from the
SYSOPS. Guess what ?. I was guilty of considerable over deviation.
Using my borrowed deviation meter I set the max deviation to 5 Khz and
would you believe I have since had no problem accessing the BBS or
have not been dropped off once, and so far my terminal has not been
requested to repeat many if any repeat frames.
-- Worth considering perhaps ?.

Good luck de Robert ZL1BF

TO BE IN HARMONY IS RESONANCE
---------- FROM ZL1ACS
(DEDICATED TO THE NEWCOMERS GETTING TO GRIPS WITH RADIO THEORY.)

RESONANCE IS NOT SO SIMPLE, WHEN WE TRY TO UNDERSTAND.
BUT WE CANNOT JUST IGNORE IT - OR DISMISS IT FROM THE LAND.
FOR, WITHOUT A RESONANT CIRCUIT - MESSAGES WOULD GO BY HAND.
THINK OF IT - THERE'D BE NO WIRELESS. WIRELESSLESS THEN WE'D BE.
WE WOULDN'T KNOW 2 PI FL, OR ONE ABOVE 2 PI FC.
YOU COULDN'T BUY TRAPS FOR YOUR DIPOLE - OR A TA33 ..
SO LET'S RESOLVE WE'LL ONE REMEMBER, OF THE NUMEROUS FORMULAE.
WE THINK IT'S OF PRIME IMPORT, TO GET THE RESONANT FREQUENCY.
HERTZ, PLEASE NOTE, IS ONE ABOVE - 2 PI ROOT LC .
73 DE KEN ZL1ACS

(continued next page)

--- End of message #7936 to NEWS from ZL1AVY ---

From : ZL1AVY
To : NEWS @NZ
Type/status : B$
Date/time : 11-Sep 03:26
BID (MID) : 7937_ZL1AB
Message # : 7937
Title : ZL DATA NEWS SEPT 12 1993 4/4

SELCAL COPY.
---------- Sent by ZL3CS
It has been interesting to hear that the 'Northern Selcal Users' are
finding that the recent change of frequency, from 40 to 80 metres, is
working out much better than expected. Some of the Auckland folk had
been through fairly difficult times and for them, the selcal, on 40m
had been almost unheard and unworkable for months. With Alan's change
to 80m the fortunes of the selcal users generally have suffered an
about face. From comments heard from up and down the length of the
'Mainland' the selcal appears to be difficult copy for a large portion
of the day and night. The unstable band conditions recently have not
helped either. Anyway, to coin a phrase, 'It's an ill wind that blows
no-one any good' and the southern folk now need to check-in around
sunrise/sunset times, and may have to throw back the covers much

earlier in the mornings to be able to access ZL1AMW satisfactorily until daylight saving compulsorily causes an earlier start.
At this QTH near Christchurch, there appears to be about an hour of reasonable copy time in the morning after 0830, and maybe a couple of hours before 1900 hrs. At other times the signal is either too weak both ways, or conditions provide many other paths with varying propagation times resulting in phase distortion of the modulation even although the signal reads s-9 on the meter. Result? Unsatisfactory QTC handling. Even on Amtor modes, ARQ loses synchronization, and FEC produces blank character spaces. At a pinch, the empty spaces could be filled with guessed characters, but with no certainty of accuracy.
Of course it makes sense to cater for a majority of users. That's what democracy is all about. It is good to hear the positive remarks from those who now have improved access. There must be ways of improving the evening copy when signals are strong. Tuning two receivers connected to separate antennas at right angles to each other has provided some interesting results. It is intended to compare vertical and horizontal antennas simultaneously when copying the evening signals from the selcal.
Unfortunately repairs are necessary to the spare u/s monitor before both receivers can be visually monitored at the same time. Here's to wishing for more Canterbury rain. (A waterproof excuse for spending lots of time in the shack.)
73 de Guthrie.

Many Thanks to our contributors this week.
That concludes this edition. Items of general interest to data mode users are solicited for future newsletters. Your contribution may be sent via post, RTTY or packet to Alan ZL1-AMW. This broadcast is normally sent at 0930 and 1900 hrs each Sunday on 3545 kHz , first in 75 B Baudot then repeated in Amtor Mode B (FEC).

73 to all from your temporary editor Doug ZL1AVY
107a New Windsor Rd. Avondale, Auckland.

--- End of message #7937 to NEWS from ZL1AVY ---

--
carl@codewks.nacjack.gen.nz (Carl Trommel)
The BBS Works -- +64 9 630 7739 NZL New Zealand's Oldest BBS

313. Is there a FAQ? I wanna talk to my robot ...

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-19 07:00:24 UTC
From: cpg@cs.utexas.edu
Message-ID: <m9o0s8INNptf@tofu.cs.utexas.edu>
Source record: 51601

Is there an FAQ for this group? I want to get started and
I really get lost with so many acronyms, the most famous of
all, TNC.

In essence I hear about Unix boxes (I have a linux box)
talking to each other in a TCP/IP packet radio network and
everything, and sounds great. My goal is to talk to a
small mobile robot platform that I have, but without any tether.
I read that those modems seem to be cheap.

Well, can someone give me some pointers to what I need to get started?

On one side I have a linux box. On the other a robot with a
microcontroller board. I don't need too much throughput, but I need
error correction, I don't want the robot to go nuts.

Thanks for any tips,

++ Carlos

314. Re: Packet on a Unix box?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-19 12:19:05 UTC
From: peter@globv1.hacktic.nl
Message-ID: <1993Sep19.121905.5009@globv1.hacktic.nl>
Source record: 51605

gsmlrn@gsm001.mendelson.com (Geoffrey S. Mendelson) writes:

>>I hope that you hams don't jump in on me for publicly stating that I'm a CBer.
>>Some hams *hate* the CB. On the other hand I meet hams on the CB packet net
>>every day, I guess not completely without reason. Anyway, you wouldn't want to
>>scare away a future colegue who is studying hard to pay of his sins, would
>>you??? ;-)

>If I were in your country I would use CB for packet. IMHO It makes no
>sense to use the ham bands there.

It does make sense. Because the CB too has it's restrictions. The amateur bands
are better organized, the CB is a complete anarchy. There are almost no NOS
users in a radius of more than 30km! A great disadvantage. ;-) I was the first
in fact in this part of the country. The situation on the amateur bands seems
much better. The few CB people I spoke who knew NOS, knew it from the amateur
bands. Another disadvantage is that experimenting with CB sets makes them
illegal. Modifications are not allowed and that limits the possible packet
speeds to 1200 bps and 2400 bps. About half of the regular availlable CB sets
can do 1200 bps and only very few CB sets can do 2400 because of the bandwidth.
The power is legally limited to 4W and the only modulation allowed is FM.
(Although that "legally" doesn't have any meaning for many people; 100W
linears and SSB sets are not very rare...) And I didn't mention the *ssholes
who deliberatly push their mikes on the packet channels...

You see, it still makes sense.

Groetjes,
Peter Busser
--
Linux, the choice of a GNU generation.

315. Responsibility for BBS messages

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-19 14:36:56 UTC
From: dave@llondel.demon.co.uk
Message-ID: <748474616snx@llondel.demon.co.uk>
Source record: 51513

Not sure if this should be here or in .policy, but as this is where I would expect to find some BBS sysops, here goes anyway.....

Can someone from the US let me know who is responsible for message contents on BBS over there? I always understood that the FCC held the originator and all the BBS sysops responsible, although someone on this side of the pond says that the responsibility is now only with the originator. Is he right, am I right or is the answer somewhere in between?

If anyone is interested, the UK rules remove responsibility from the BBS sysop unless he has reviewed the message, so if I didn't look at it, it isn't my fault :-)

Dave
--

****
* G4WRW @ GB7WRW.#41.GBR.EU AX25 * Start at the beginning. Go on *
* dave@llondel.demon.co.uk Internet * until the end. Then stop. *
* g4wrw@g4wrw.ampr.org Amprnet * (the king to the white rabbit) *
****

316. Re: Is there a FAQ? I wanna talk to my robot ...

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-19 15:22:53 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1993Sep19.152253.28974@ke4zv.atl.ga.us>
Source record: 51603

In article <m9o0s8INNptf@tofu.cs.utexas.edu> cpg@cs.utexas.edu (Carlos M. Puchol) writes:
>Is there an FAQ for this group? I want to get started and
>I really get lost with so many acronyms, the most famous of
>all, TNC.

Yes, there's a FAQ, but I'll address the "what's a TNC" question right away. TNC stands for Terminal Node Controller; yes packet started before personal computers were common and dumb terminals were the rule. So we had a dumb terminal connected to this little box with a microprocessor and a modem in it. The microprocessor executed firmware that did the PAD function, Packet Assembler/ Disassembler, channel management, and user interface. The modem did the Bell 202 half duplex tone encoding/decoding.

Somewhat unfortunately, TAPR came along and offered a very good TNC, the TNC2, that was cheap, reliable, effective, and licensed to several commercial manufacturers. This had the effect of freezing a by now obsolete paradigm in silicon and copper. So we still use TNCs today despite the fact that we almost all now have real computers on our desks, and 1200 baud is painfully slow. The user interface in the TNC was designed to work with a human at a terminal. It's not well suited to automatic computer control. So other interfaces have been kludged onto the firmware. Things like the host mode and KISS modes you'll read about here.

Today the TNC is becoming obsolete from two different directions. First, the TNC hardware can't keep up with the faster modems now available. And second, PC software that does the functions of the TNC firmware is now widely available. Faster speed is being addressed by special dedicated plugin hardware like the Gracillis boards or the Ottawa PI cards. On the low speed end, Baycom style simple modems and software are gaining ground. But there's still a huge installed base of TNCs, and systems have to maintain compatibility with this older technology to gain sufficient user base.

Gary

--
Gary Coffman KE4ZV |"If 10% is good enough | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | for Jesus, it's good | uunet!rsiatl!ke4zv!gary
534 Shannon Way | enough for Uncle Sam."| emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -Ray Stevens |

317. NF3I -- Scott Rosenfeld

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-19 18:06:25 UTC
From: aflorenc@news.vt.edu
Message-ID: <aflorenc.2.748461985@news.vt.edu>
Source record: 51604

Attention Scott Rosenfeld, NF3I, in Maryland. Please E-mail me.

Adam Florence
aflorenc@vt.edu

318. "Digital" to Europe; your thoughts on the best ways?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-20 01:57:31 UTC
From: slm@world.std.com
Message-ID: <CDMqrv.on@world.std.com>
Source record: 51606
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.misc

Greetings! I hope some folks here on the net can offer some suggestions, advice, and opinions on the following ``problem.''

I am in New England, and want to send a digital message to a friend in Slovenia. Alas, he has no Internet connection :-) ... but he is on ``regular'' (i.e. AX.25) packet.

I have been simply writing my messages on my local BBS (K1UGM), which forwards them to a regional hub in New Hampshire, which then ships them via AMTOR to a system in Croatia (which is down a fair amount), which then forwards themto Slovenia. This can take less than a day with a lot of luck; it also can (and often has) take longer than postal mail.

I'm trying to figure out what might be faster and still reliable, and have been thinking about the following:

* TCP/IP. I hear some folks are experimenting with ``encapsulating'' TCP/IP ham messages in Internet to get them ``over the pond,'' which seems nice, fast, and reliable (no worries about solar flares). However, my friend on the other side isn't on TCP/IP (actually, neither am I yet, although I will make the effort to set up and learn if it seems it will be worthwhile). Could this still work? Are there gateways I could use to send messages reasonably fast to Europe? Could I realistically (not awfully slow) telnet via TCP/IP into a BBS in Europe to forward a message? Can I send a TCP/IP message here and have it get reasonably fast to an AX.25 system in Europe?

* Routing AX.25 through NY. Most international traffic in New England is routed through the hub in NH. However, from what I've read, it looks like New York has a very nice gateway into London; and WA2NDV forwards ``twice hourly.'' I tried getting into WA2NDV myself via 2m AX.25; but through 4 digipeaters, it is too slow to be worthwhile. What about sending a message on my local 2m AX.25 board and somehow routing it to go through WA2NDV? Can I do this--tell a message on a BBS how I want it routed? Would I then I need to know an entire path also from London to Slovenia? [Please excuse me if these questions seem painfully elementary, but I'm curious and don't know]

* AMTOR myself to 9A0APL. I've never used AMTOR but have the capability (PK-232). Perhaps it's worthwhile to send my mail myself to 9A0APL via AMTOR, instead of having the NH hub do it for me? Could I sign onto the system myself and send a message to forward somewhere else, like on a packet BBS?

* Internet/packet gateway? There's such a thing in the States, I know; but is it possible to send an Internet message to a system in Europe that would

then put it back into the packet system there?

* Any other ideas? (i.e. HF packet, which I heard is terribly slow, or something else)

Thanks for your thoughts. Although what I have been donig (using the local 2m BBS) has been working, I'd really like to know more about this than just posting on a local BBS and having the messages eventually arrive, "somehow," to their destination.

73, Sharon KC1YR

--
electronic address: slm@world.std.com

319. Packet/Internet gateway?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-20 05:02:19 UTC
From: cbr600@sportster.ksu.ksu.edu
Message-ID: <27jdgrINN96q@sportster.ksu.ksu.edu>
Source record: 51607

I was just reading through the newsgroups this evening, and in the previous post I saw something about packet/Internet gateways? I have always been fascinated about the posibility of this, and I wondered how it was accomplished...also, how I would go about sending a message through this sort of gateway to have it arrive to another packet user, or vice versa...although I am a licensed amateur, (no-code variety), I do not as of yet have a TNC or 2-meter rig to run packet radio...any help on this subject would be greatly appreciated.

Jeremy L. Utley	I didn't do it, nobody saw me
cbr600@ksuvm (Bitnet)	do it, You can't prove any-
cbr600@matt.ksu.ksu.edu (Internet)	thing. - Bart Simpson
N0YAX@WZ0M.KS.USA.NA (Ham Radio)		
---

320. Re: "Digital" to Europe; your thoughts on the best ways?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-20 06:53:18 UTC
From: dave@llondel.demon.co.uk
Message-ID: <748533198snx@llondel.demon.co.uk>
Source record: 51616
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.misc

In article <CDMqrv.on@world.std.com> slm@world.std.com (slm) writes:
>
>* TCP/IP. I hear some folks are experimenting with ``encapsulating'' TCP/IP
>ham messages in Internet to get them ``over the pond,'' which seems nice,
>fast, and reliable (no worries about solar flares). However, my friend on the
>other side isn't on TCP/IP (actually, neither am I yet, although I will make
>the effort to set up and learn if it seems it will be worthwhile). Could
>this still work? Are there gateways I could use to send messages reasonably
>fast to Europe? Could I realistically (not awfully slow) telnet via
>TCP/IP into a BBS in Europe to forward a message? Can I send a TCP/IP
>message here and have it get reasonably fast to an AX.25 system in Europe?
>
You will probably find that even if you could get a message to Europe by
this method, it would still be fairly slow on the VHF links into Slovenia
so you wouldn't necessarily gain much over the HF hop to the area. You might
even find that your message would do a hop or two on HF across Europe anyway.

I don't know of any internet gateways in the UK - licence regs are unclear
as to whether it is allowed, and chances are someone would have to pay for
the cost of the internet connection so that makes it even more unlikely.

Dave
--

****
* G4WRW @ GB7WRW.#41.GBR.EU AX25 * Start at the beginning. Go on *
* dave@llondel.demon.co.uk Internet * until the end. Then stop. *
* g4wrw@g4wrw.ampr.org Amprnet * (the king to the white rabbit) *
****

321. Re: packet radio & distance education

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-20 09:59:05 UTC
From: meyer@amundsen.fernuni-hagen.de
Message-ID: <meyer-200993115506@mac-6.fernuni-hagen.de>
Source record: 51609

In article <27d000$6kb@nermal.cs.uoguelph.ca>, bapgar@uoguelph.ca (Bill Apgar) wrote:

> Additionally -- since packet radio involves transceiving, what limitations
> does this impose for those who would like to 'receive' packet radio
> broadcasts, but do not have digital operator's licencing?

If you want an error-free point-to-point connection both stations have to transmit (at least for acknowledge/reject signals). But you can still broadcast packages (everybody can receive them) or arbitrarily many stations can monitor
a single point-to-point link. Of course, then you risk loss of packages at some
stations.
For broadcasting without error-recognition there are better techniques than packet radio. The reason why is that packet uses a checksum on packages. So a single bit error causes at least one package to be lost. Depends on the packet size how much data this is. Other techniques loose only this bit. So only a single character (or pixel, if you use fax) is lost.

Bernd (meyer@fernuni-hagen.de, DB6AG)

322. Re: packet radio & distance education

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-20 12:40:57 UTC
From: trier@odin.ins.cwru.edu
Message-ID: <27k8cp$dav@usenet.INS.CWRU.Edu>
Source record: 51610

In article <MIKE.93Sep20172038@allegro.uxp.bs2.mt.nec.co.jp>,
Mike Collinson <mike@uxp.bs2.mt.nec.co.jp> wrote:
>...TCP/IP and AX.25 assume two-way communication and
>error correction. I would assume the main problem would be error
>correction, i.e. if the "listener" receives a bad packet it cannot
>broadcast a message back saying "send it again".

Actually, there is nothing in the TCP/IP suite that mandates only two
nodes on a connection. TCP has this limitation, but UDP does not and
the new experimental reliable multicast protocols also lack this
limitation.

A reliable multicast protocol would be a natural for packet radio.

Stephen

--
Stephen Trier (trier@ins.cwru.edu - MIME OK) "This is not a computer --
Network Software Engineer this is my arch-enemy!"
IRIS/INS/T O'Brien, DS9
Case Western Reserve University

323. SCDX 2187

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-20 14:07:46 UTC
From: p00489@psilink.com
Message-ID: <$scdx2187@ampr.org>
Source record: 51619
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.info

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::::::::::::::::::::::::::::::::::::
:: MediaScan ::
:: SWEDEN CALLING DXERS ::
:: from Radio Sweden ::
:: Number 2187--Sept. 21, 1993 ::
::::::::::::::::::::::::::::::::::::
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Satellite, shortwave and other electronic media news from Radio Sweden.
This week's bulletin was written by George Wood.

Packet Radio BID SCDX2187

All times UTC unless otherwise noted.

NORDIC MEDIA NEWS:

RADIO SWEDEN--Beginning September 26th, Radio Sweden will be broadcasting in English:

To Europe:

17:15 hrs on 1179 and 6065 kHz
18:30 hrs and 21:30 hrs on 1179, 6065, and 9655 kHz
22:30 hrs on 1179 and 6065 kHz
23:30 hrs on 1179 kHz

To East Africa and the Middle East:

18:30 hrs on 15145 kHz

To Asia and the Pacific:

12:30 hrs on 15240, 17740, and 17865 kHz
23:30 hrs on 11910 kHz
01:30 hrs on 9695 and 11695 kHz

To North America:

13:30 and 14:30 hrs on 15240 and 17870 kHz
02:30 and 03:30 hrs on 9695 and 11650 kHz

To Latin America:

00:30 hrs on 9695 and 11650 kHz

The broadcasts at 17:15, 18:30, 21:30 (weekends only), and 22:30 hrs are relayed on satellite on Astra transponder 26 (Sky Movies Gold) audio 7.74 MHz

and Tele-X on 12.207 GHz (TV4) audio 7.38 MHz.

SWEDEN--The big media news in Sweden is the impending industrial action at the public service Swedish Broadcasting Corporation, home of Radio Sweden. Recently the corporation signed a new contact with the Swedish Journalists Union. But negotiations broke down with the union representing other employees. Last week the union officially anounced a ban on overtime by more than 1000 members, beginning on September 23rd.

The ban covers most employees working for Swedish Television in Gothenburg and Malmo, as well as all sound and service technicians working for the Swedish Radio, including the local radio stations. (TT)
During previous industrial action, news programs and Radio Sweden were allowed to continue without hindrance. It remains to be seen if that will be the case starting Thursday.

TV4--Sweden's Broadcast Council has once again ruled that the country's only terrestrial commercial channel, TV4, has violated its licence by broadcasting advertising in the middle of programs. It's the 8th time the board has ruled against the channel, which now says that it will stop the illegal practice next week. TV4 had appealed to the government to change the terms of its licence, but the government rejected the appeal in May. (TT)

DECODERS--The Swedish government has also proposed a ban on pirate decoders to avoid paying for cable TV and radio. The ban would only apply to the manufacture, rental, and installation of such decoders, so private individuals would still be allowed to own pirate decoders. If passed by parliament, the ban would go into effect on January 1st. (TT)

There's a lively business in pirate decoders in Sweden because of high cost of cable-TV. A basic package with 5 Swedish channels and the 5 or so most common English-language channels costs around twenty-five dollars a month from Stockholm's largest cable network. Swedish Telecom's network, the largest in the country, charges an extra 10 dollars a month for a mandatory decoder, with subscribers forced to rent extra decoders for extra outlets in their homes.

By contrast, in the United States, the Federal Communications Commission recently passed new rules controlling cable rates, forcing many systems to lower their prices for the standard 30 to 46 channel packages. In northern California, for example, these now cost between twenty and twenty-three dollars a month. Also the charge for converter and decoder boxes have to be based on what those devices actually cost the cable operators, and operators can no longer change extra for homes with multiple outlets. ("Santa Rosa Press-Democrat")

THOR--The pay-TV package on Norway's Thor satellite is now complete. MTV has joined CNN, Eurosport, FilmNet Movies, and a joint transponder combining Discovery and the Children's Channel. With the exception of FilmNet, which is in D2-MAC, these all use the obscure D-MAC standard, and all use the even more obscure Eurocypt S coding system. Although, so far only advertised in Norway, the Thor package is intended as well for Finland and northern Sweden,

which have difficulty receiving Astra.
("Skyguide" and "SatNews")

But Norwegian Telecom, which operates Thor, wants around 8 dollars a month for the service, without FilmNet, which costs extra. This may be more than many Scandinavians are willing to pay. In comparison, Sky's basic Multi-Channel package, with all these channels plus at least nine more, is available for 7 pounds, or around 10 dollars, a month.

Meanwhile, in the United States, satellite subscription packages range from under nine dollars a month for 11 channels to 20 channel offerings for under 15 dollars and 31 channel packages with several film channels for 50 dollars a month. ("Satellite TV Weekly")

EUROPEAN MEDIA NEWS:

MTV--MTV's move to Thor adds fuel to the speculation that the channel is planning to encrypt its Astra feeds in mid-1994 using Videocrypt. Previously these claims were denied by the company, even though when British Sky Broadcasting began advertising for its multichannel service it claimed that MTV would be included within the encryption package.

MTV executives protested to British Sky Broadcasting and the advertisement was changed. According to "SatNews", engineering sources at MTV and News Datacom say that several Videocrypt encoders have been ordered by MTV. ("SatNews")

MTV has also appeared on Eutelsat 2F1 on 11.658 GHz. The programming is currently identical to the Astra version, although in the future it is understood that this outlet will be used to offer specific programming (and advertising) to Germany. "Sky Guide" speculates that MTV's appearance on Eutelsat could also be to counter the future opposition of German youth channel "Viva", due to launch in October on the same satellite. ("Skyguide" and James Robinson)

SKY CHANNELS TO EUROPE?--Now that the Sky Multi-Channel package is running, British Sky Broadcasting's owner Rupert Murdoch is planning to work with the German channel Pro 7 to launch a package of subscription satellite channels throughout Europe. The agreement, made at International Funkaustellung '93, is understood to pave the way for the marketing of six English language channels, initially in Germany, and eventually throughout Western Europe. ("Skyguide")

SKY EXPANDS--Speaking in London recently, British Sky Broadcasting owner Rupert Murdoch also put an end to speculation by confirming his intent to launch a second sports channel on Astra. The second channel is very likely to become a testing ground for pay-per-view events, and according to "Sky Guide", is likely to be up and running in time for the next Premier League soccer football season.

Murdoch's News International has also contracted NTL to join a group developing a multi-channel digital TV system for direct satellite reception in the home. NTL will develop the encoding, decoding and multiplexing

technology. The eventual domestic receiver will be mass-produced under licence for the comsumer market in Europe, Asia and elsewhere. ("Skyguide")

RED HOT TV--The pornography channel Red Hot Television, which is upliked from Denmark, has returned to the satellite airwaves, but not where it was expected. According to "Skyguide" RHTV was unable to secure its previous transponder on Eutelsat 2F1, and the channel is now broadcasting on a completely different satellite - Eutelsat 2F3, on 10.986 GHz.

The channel is alternating between its existing SAVE encryption system, and new Videocrypt-compatible system "Enigma". ("Skyguide")

TURNER BROADCASTING--The Cartoon Channel and TNT broadcast test transmissions on Astra 1C, transponder 37, before their September 17th launch.

The channels will broadcast in English, French, Norwegian and Swedish, with a Spanish language service to follow by the end of 1994, possibly in line with a Spanish audio service for CNN International.

French authorities are apparently unhappy at the prospect of these new channels broadcasting in the French language, apparently viewing the prospect as an invasion of French territory.

The authorities and broadcasters have been lobbying to get the channel to drop the French audio, apparently unsuccessfully so far. The French cultural elite is protesting the broadcasts of Yoga Bear and Fred Flinstone in French as cultural imperialism. The crusade has brought together bitter political rivals from both left and right. The Paris daily "Le Figaro" quoted an unidentified Turner official as accusing the French authorities of attempted "ethnic cleansing" of the airwaves. ("Skyguide" and AP)

FRANCE--Just weeks after MCM returned to TDF1, and viewers across Europe welcomed its return, comes the news that MCM will scramble its transmissions from October 15th. Subscriptions will be made available to European viewers, although pricing details are not known at this time. ("Skyguide")

WORLD RADIO NETWORK--The long-awaited World Radio Network service of international broadcasters in English began tests on Astra on September 15th. They're using MTV's transponder 22, 11.538 GHz, audio 7.74 MHz. The official launch of the new service will be October 1st.

The current relays of National Public Radio from the United States are being moved from Eutelsat. Joining them will be programs from American Public Radio and many international broadcasters. Here is the tentative weekday schedule (British local time):

05:00-05:30 Radio Canada International
05:30-06:00 BBC "Europe Today"
06:00-07:30 NPR "All Things Considered"
07:30-08:00 APR "Market Place"
08:00-09:00 Radio Australia
09:00-10:00 Radio Korea
10:00-10:30 Radio Moscow

10:30-11:30 Radio Netherlands
11:30-12:00 to be announced
12:00-12:30 Voice of Israel
12:30-13:00 WRN Information
13:00-15:00 NPR "Morning Edition"
15:00-15:30 Radio France International
15:39-16:00 Radio Finland
16:00-17:00 Radio Australia
17:00-18:00 APR "Monitor Radio"
18:00-18:30 to be announced
18:30-19:00 Radio Telefis Eireann (Ireland)
19:00-21:00 NPR "Talk of the Nation"
21:00-21:30 Swiss Radio International
21:30-22:00 BBC "Europe Today"
22:00-23:30 NPR "All Things Considered"
23:30-24:00 APR "Market Place"
00:00-01:00 APR "Monitor Radio"
01:00-02:30 NPR "All Things Considered"
02:30-03:30 Radio Netherlands
03:30-04:30 music
04:30-05:00 Vatican Radio

The schedule varies somewhat on weekends and is subject to change. Note that Europe and Britain have the same local time between Sept. 26 and Oct. 24. (WRN)

GERMANY--Managing Director Dieter Weirich announced at the Internationale Funkaustellung in Berlin on August 30th that Deutsche Welle TV will be expanding to 24 hour a day service from 1994. However, the expansion from 16 hours at present would oly be possible if ARD and ZDF agree to work together. (DPA via BBC Monitoring) One wonders what will happen to the American Worldnet programming, which shares the Deutsche Welle transponder on Eutelsat 2F1 (having been kicked off the French TV5 transponder for exactly the same reason)?

PUBLICATIONS--Super Channel's Teletext satellite news service, "In Orbit", is now available to Astra viewers via UK Gold's teletext service. While UK Gold is scrambled, even viewers without a subscription can view the teletext. Weekly satellite news, updated every Tuesday, is available on page 333, with a letters section on 334.

The content of the services vary slightly - Super Channel's version is consistently more critical of Astra and Sky, while the UK Gold version appears (at the moment) to be much more neutral. ("Skyguide")

NORTH AMERICAN MEDIA NEWS:

PARAMOUNT VIACOM INTERNATIONAL--In what will be the biggest media industry merger ever, Paramount Communications Inc. and Viacom Inc. have agreed on a 16.5 billion dollar merger plan. If completed it would signal the passing of the last of Hollywood's major studios to a new generation of corporate leaders.

The new company will be the world's 5th largest media conglomerate, following Time Warner, Germany's Bertelsmann, Sony, and Rupert Murdoch's News Corporation, and pushing Capital Cities/ABC into 6th place.

Paramount is the owner of a major Hollywood film and TV studio. Its 900 movie library includes "The Godfather", "Beverly Hills Cop", and "Indiana Jones." Among Paramount's TV productions are "Star Trek", "Murder She Wrote", and "Cheers".

Viacom is the owner of satellite/cable TV channels MTV, VH-1, Showtime and Nickelodeon, as well as cable networks with more than 1 million subscribers. (AP and "Los Angeles Times")

However, Turner Broadcasting is also reported to be weighing a bid for Paramount. (Bloomberg Business News)

STAR TREK--Speaking of "Star Trek", with the shifting of Paramount's satellite feed channel from the Telstar 301 satellite to Telstar 302, transponder 3, here is the current feed schedule for the two popular science fiction programs "The Next Generation" and "Deep Space Nine" (Eastern Time):

Saturdays:

10:00 AM DS9
4:00 PM DS9
7:00 PM TNG

Sundays:

2:00 PM TNG
4:00 PM DS9
5:00 PM TNG

"Satellite TV Weekly" also lists a TNG feed on Saturdays at 2:00 PM, but this has not been in evidence.

ASIAN MEDIA NEWS:

INDIA--A new 9 channel satellite television service to India is to be begin on January 1, 1994. The nine channels carried by the joint American-India network are to cover: religious and spiritual programming; politics; children's programming, entertainment, music and movies; sports; medicine, health, fitness and sex education; business and economy; and development, environment, and women's issues, science, and technology. Broadcasts are to be over two satellites, the Russian Statsionar 21 at 103 degrees East, and Asiasat. (PTI via BBC Monitoring)

AMATEUR RADIO IN SPACE:

MICROSATS--Ariane launch 59 is scheduled for Saturday, September 25th, between 01:27 and 01:45 hrs UTC. The main payload is the Franco-Swedish Spot-3 satellite, but Ariane will also be carrying a number of small "micro-sats", several of which will be available for amateur radio operators.

The most interesting is the Italian amateur radio satellite Itamsat, which will downlink both voice FM and digital packet radio signals on 435.867 and

435.822 MHz. The commercial Portuguese PoSat will downlink amateur radio signals on 435.250 or 435.275 MHz. Kitsat-B is similar to the first South Korean satellite, now in orbit as KO-23, with digital downlinks on 435.175 and 436.500 MHz. Finally, the American commercial satellite Eyesat-A will sometimes relay digital and FM voice amateur radio signals on 436.800 MHz. (Internet News via Kauto Huopio and "AMSAT-SM Newsletter")

The Ariane launch will be relayed over some satellite links, and will certainly be carried by the Amsat network on many shortwave frequencies.

SHORT AND MEDIUM WAVE AND DOMESTIC RADIO:

ALBANIA--The Voice of America is using a medium wave transmitter in Albania on 1395 kHz to reach the former Yugoslavia. Serbian has beenheard at 03:45-04:00 hrs, and Croatian at 04:30-05:00 hrs. Radio Tirana's scheduled 04:00-04:15 hrs broadcast in German continues to be heard on this frequency. (BBC Monitoring)

BRITAIN--The Radio Authority has awarded LBC's licence and has awarded it to London News Radio. London News Radio's Editor in Chief will be former LBC Managing Director Peter Thornton and the station will employ a number of former LBC staff. Its chairman is John Tusa, former boss of the BBC World Service and currently presenter of the One O'Clock News on BBC Television. The BBC did not know of his involvement until the announcement on Friday. LNR's backers are led by merchant bank Guiness Mahon and French media group Hachette. It will offer a rolling news format on its FM frequency, repeating every 20 minutes throughout the day. AM will be a mix of phone-ins, discussions and news similar to London Talkback Radio. It expects to employ around 160 staff, compared with the 120 currently employed by LBC. LNR will begin broadcasting in October 1994.

Two new stations have been awarded licences. London Country Radio plans to launch in January and will broadcast on 1035 AM. It is backed by the Allied Radio Group. Sunrise Radio will expand Londonwide from their current West London operation. From early 1994 their Asian programming will be heard on the 1458 AM frequency currently used by GLR. Their existing licence for West London will be re-advertised later.

Two further Londonwide licences are expected to be advertised in 1994, at the same time as those for Capital Radio's two frequencies are re-advertised. Unsuccessful applicants in the current round will be able to re-apply then without a further application fee. The licences for Jazz FM, Kiss FM, Melody Radio and Spectrum International were all retained by their respective companies.

The BBC is expected to announce its decision on its proposed rolling news service later than originally planned. It had anticipated making an announcement in September as to whether the service would go ahead and on what frequency. However, it now seems likely that a decision will be held off until October or possibly November. Reports from BBC staffers suggest that a merger with Radio Five to form a news and sport network remains the most likely option. ("AM/FM" via Kauto Huopio)

ESTONIA--Last time we reported on Estonia's closing its international service, although BBC Monitoring reports that Radio Tallinn programs are continuing on FM. Kauto Huopio reports that Estonia seems to be leaving medium wave. He says 1035, 1215, 1332 and 1512 kHz have been more or less quiet lately. Kauto says it is also rumoured that Estonia is moving their FM radio very rapidly to western FM Band, at first to 100-108 MHz and then to full 87.5-108 MHz. (Kauto Huopio, Finland)

LATVIA--A new station calling itself Brivi Veji ("Free Winds") has been heard on 945 kHz. A relay of VOA Europe has been carried at 12:00 hrs. (BBC Monitoring)

LIBERIA--Radio ELWA, the station in Monrovia operated by the Christian religious organization, the Sudan Interior Mission, has been heard again on 4760 kHz after a break of three years. It's been heard at 16:30-22:00 hrs and also announces a morning transmission starting at 06:00 hrs. (BBC Monitoring)

LITHUANIA--Baltic Radio International in Lithuania, widely believed to be a chimera, has started building work at its new transmitter site near Butinges. BRI is to build six radio masts, a transmitter building, generator and official premises with a reserve studio, all costing 1,400,000 pounds. BRI programs will consist of pop music, with several minutes of advertisements every hour. (Lietuvos Rytas in FDXA "Euronews")

As we reported last week, BRI is to use 684 kHz (and was to be on the air "this summer" according to General Manager Paul Rusling).

NICARAGUA--Radio Sandino has moved from 760 kHz to a new and stronger transmitter on 740 kHz. (Radio Sandino via BBC Monitoring)

NORWAY--The Norwegian student station UKE-Senderen, in Trondeheim, will be on the air again during the annual UKA festival, which this year is from the 22nd of October and until the 14th of November. The frequencies are 1485 kHz and 7245 kHz. (Jon Gunnar Solheim, via Internet News and Kauto Huopio)

PALESTINE--According to Radwan Abu-'Ayyyash,chairman of the Social Solidarity Society, the Palestineans will launch regular radio and television broadcasts within four months of the implementation of self-rule in Gaza and Jericho. (BBC Monitoring)

RUSSIA--Moscow has two different MW radio stations for motorists. Avtovolna is at 0300-0600 on 1116 kHz. The address is: Ul.Lesnaya 41, Avtobank, Room 412-A, 101514 Moscow. Another station, Avtoradio is on 765 kHz. (G.Grigoriev via BDXC via ARC via FDXA "Euronews")

FUTURE TECH:

HDTV--Cinema-quality high definition television (HDTV) may soon be a reality in European living rooms under a plan launched recently to find a common European standard for digital transmission. A group of satellite operators, broadcasters, manufacturers and regulators have signed a memorandum of understanding in Bonn.

"They are jointly undertaking to make every effort to provide European digital television and to place it on the market as from 1995," said Wolfgang

Boetsch, Germany's Minister of Posts and Telecommunications, after the signing.

The Digital Video Broadcasting Project (DVB) groups 85 members, including at least one Japanese electronics firm. But the core of firms are from Britain, Germany, France, Italy and the Netherlands. Peter Kahl, an official from Boetsch's ministry and the new head of the DVB, told a news conference: "Europe doesn't want to lag behind in these developments." He predicted there would be a standard for satellite transmissions by the end of this year, and a standard for cable services some time in 1994.

All-digital standards use signals similar to those employed by computers and are seen as the way forward for television. The agreement to search for a standard clears the way for the development of a range of advanced television services. Digital transmission can carry large numbers of channels simultaneously, ranging from "multi-channel" satellite services to terrestrial HDTV. It makes possible teleshopping, personal computer link-ups and other interactive services.

"I'm not a prophet, but at a conservative estimate, there will soon be 100 channels on your television," said Kahl. Recently, the European Community agreed to provide 228 million Ecu (274 million dollars) to promote the television technology which will bring cinema-quality HDTV into consumers' homes.

But the EC plan, formulated in July, left the choice of transmission standard to the market. The European group coalesced after the recent formation of an industry alliance across the Atlantic working on a single all-digital HDTV system for the United States. Kahl said the organisation had not requested funds from the EC. It would be financed mainly by membership fees and research would come out of members' own pockets.

The group includes the European Commission as an observer and Britain's Department of Trade and Industry among others. Philips Electronics NV of the Netherlands, Thomson SA of France, Sony Europe, the British Broadcasting Corporation and Germany's Grundig AG are also involved. (Reuters)

Japan's television and video industry has welcomed European efforts to move towards a common digital standard for high definition television (HDTV), industry analysts said on September 13. Currently several transmission formats are used in the world, including NTSC, PAL and SECAM, so a common standard would make it easier from a maker's point of view, an official at a major Japanese consumer electronics company said.

Although Japan uses an analog version of HDTV, it would not mean Japanese makers would have a disadvantage in the European market, analysts said. All manufacturers would need to comply with a new standard for Europe, so that everybody, whether Japanese or European, would be starting from same position, the analysts said. "No one will have a competitive advantage," Camp said. "Everyone will have to make adjustments, not just the Japanese." (Reuters)

The remaining American HDTV proponents were brought together in an American "Grand Alliance" by the Federal Communications Commission recently. At the recent Montreaux ITVS Show, where HDTV was a major topic, the chairman of the FCC Advisory Committee on Advanced Television Service, Richard E. Wiley, invited the Europeans into a "Tres Grand Alliance", to join together with the Americans in creating a single HDTV standard. ("World Broadcast News")

USA--The Federal Communications Commission has held a lottery to determine who wins the right to operate two-way television broadcast systems in nine American cities. More than 1000 companies filed 4100 applications for the 18 interactive and video data service (IVDS) licences, two in each of the nine cities. The IVDS frequencies were previously used for automated river boat traffic.

Lottery winners are expected to turn to one of three companies in the field: Interactive Network of Mountain View, California, Radio Telecom and Technology of Riverside, California, and Eon of Reston, Virginia.

According to Interactive Network, which currently operates a limited service in northern California and Chicago, consumers would pay around 250 dollars for a hand-held reception unit, plus about 15 dollars a month. The service allows viewers to play along with televised game and news programs.

Eon has already signed up Domino's Pizza, the Weather Channel, the J.C.Penney department store chain, and a sports game company to offer interactive programs. For example, a TV viewer using the system could order a pizza, a dress from Penney's, a customized weather forecast, or play along with a football team with a click of their remote control.

On September 23rd the FCC will announce how it will divide up another set of frequencies for what are called personal communication services. Hundreds of companies are vying for the right to offer light-weight, wireless personal communication service phones to the public.

The services will probably not be available until 1995, because the FCC still has to decide how many licences it will grant in each city, whether current cellular licensees are eligible, and the phones' technical standards. ("San Francisco Chronicle")

Sweden Calling DXers is the world's oldest radio program for shortwave listeners. Radio Sweden has presented this round-up of radio news, features, and interviews on Tuesdays since 1948.

Radio Sweden broadcasts in English:

Europe and Africa:

15:00 hrs on 1179 khz (weekdays only)
16:15 hrs on 1179 and 6065 kHz
17:30 hrs on 1179, 6065, and 9645 kHz
20:30 hrs on 1179, 6065 and 9655 kHz
21:30 hrs on 1179 and 6065 khz, and
22:30 hrs on 1179 and 6065 kHz

Middle East and East Africa:

15:00 hrs on 15190 kHz and
17:30 hrs on 15270 kHz

Asia and the Pacific:

12:30 hrs on 15240 and 21500 kHz
22:30 hrs on 11910 kHz and
01:00 hrs on 9695 and 11820 kHz

North America:

15:00 hrs on 15240 and 21500 kHz and
02:00 hrs on 9695 and 11705 kHz

South America:

00:00 hrs on 9695 kHz

The broadcasts at 12:30, 16:15, 17:30, 20:30 (weekends only), 21:30, and 22:30 hrs are also relayed to Europe by satellite:

Astra 1B (19.2 degrees East) transponder 26 (Sky Movies Gold/TV Asia/Adult Channel) at 11.597 GHz, audio subcarrier at 7.74 MHz,

Tele-X (5 degrees East) (TV4 transponder) at 12.207 GHz, audio subcarrier 7.38 MHz.

Contributions can be sent to DX Editor George Wood by fax to +1-707-468-1460, via Internet to 70247.3516@compuserve.com, or by MCI Mail or CompuServe to the CompuServe mailbox 70247,3516.

Reports can also be sent to:

Radio Sweden
S-105 10 Stockholm
Sweden

Contributions should be NEWS about electronic media--from shortwave to satellites--and not loggings of information already available from sources such as the "World Radio TV Handbook". Clubs and DX publications may reprint material as long as MediaScan/Sweden Calling DXers and the original contributor are acknowledged, with the exception of items from BBC Monitoring, which are copyright.

We welcome comments and suggestions about the electronic edition, Sweden Calling DXers, and our programs in general.

Thanks to this week's contributors Good Listening!

324. Re: HAPN packet, what is it?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-20 14:13:23 UTC
From: eac@world.std.com
Message-ID: <CDnouC.r3@world.std.com>
Source record: 51611

In <199309152002.AA51185@freenet.scri.fsu.edu> bmm1@freenet.scri.fsu.edu (Bruce M. Marshall) writes:

>I recently purchased a DSP-12 which has a mode called HAPN packet.
> Does anyone know what HAPN packet is?

The HAPN Modem is a 4800 baud modem put out by a group called HAPN. It's advantage over 9600 baud is the audio can be fed into the mic and taken from the speaker without modification (or little modification?).

The local TCP/IP group got two to try but ran into problems getting them to work right.

73 Eric eac@world.std.com

325. DRSI DPK-9600 TNC

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-20 17:21:34 UTC
From: michaelc@rtp.raleigh.ibm.com
Message-ID: <CDnxJy.MDE@sernews.raleigh.ibm.com>
Source record: 51613

Has anyone used the new DRSI DPK-9600 TNC? A group of hams in the Raleigh/Cary area are considering 9.6k/19.2k packet and the DRSI modem looks interesting. Any information will be appreciated.

73, Mike
KB4LFH

==========
kb4flh
kb4lfh@vnet.ibm.com
Cary, NC
==========

326. DRSI DPK-9600 TNC

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-20 17:22:53 UTC
From: michaelc@rtp.raleigh.ibm.com
Message-ID: <CDnxM5.G2p@sernews.raleigh.ibm.com>
Source record: 51614

Has anyone used the new DRSI DPK-9600 TNC? A group of hams in the Raleigh/Cary area are considering 9.6k/19.2k packet and the DRSI modem looks interesting. Any information will be appreciated.

73, Mike
KB4LFH

==========
kb4flh
kb4lfh@vnet.ibm.com
Cary, NC
==========

327. Where will the SARTG RTTY contest results appear?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-20 17:37:00 UTC
From: nmr1248@venus.lerc.nasa.gov
Message-ID: <20SEP199313372106@venus.lerc.nasa.gov>
Source record: 51612

Hello,

I participated in the SARTG RTTY contest in August and am in the process of sending out my log and results. However, since this contest was sponsored by Scandinavia (I hope that's right), I was wondering if there is a way for me to get the results and see how I place. Is there a particular magazine that would list the results here in the US, or will I have to get the magazine from the country that originated the contest? I know QST and CQ list the results of contests they run, i.e. CQ Worldwide DX contest but I don't remember seeing any contest that originated from other countries. Any ideas or suggestion would be appreciated, especially from those who have worked this contest before.

This was the first RTTY-type contest I've ever worked so I am just looking to see how I did and how others did also.

Thanks in advance

Nancy Rabel Hall nmr1248@venus.lerc.nasa.gov
Space Station Freedom --... ...-- -.. . KC4IYD
NASA - Lewis Research Center stamp collector, SF addict

328. Re: packet radio & distance education

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-20 22:20:38 UTC
From: mike@uxp.bs2.mt.nec.co.jp
Message-ID: <MIKE.93Sep20172038@allegro.uxp.bs2.mt.nec.co.jp>
Source record: 51608

>>>>> On 18 Sep 93 03:34:40 JST, bapgar@uoguelph.ca (Bill Apgar) said:

> I have read at least one article which discusses the use of packet
> radio in Africa and elsewhere to support or provide distance education
> programs. I am interested in knowing if any reader(s) are aware of,
> or participating in such initiatives or programs, and further if any
> involve radio amateurs in either hosting nets or relaying.

> I have a _little_ background in the technology (enough to handle some
> technological concepts). I am researching farmer/rural access to
> agricultural information through telecommunications technologies and
> would like to include packet/digital radio in my overview.

> Additionally -- since packet radio involves transceiving, what limitations
> does this impose for those who would like to 'receive' packet radio
> broadcasts, but do not have digital operator's licencing? Several years
> back I heard that because a packet requires echoing back from the
> receiver, the receiver itself must therefore also be a transmitter,
> and in North America at least, the DOC and FCC would require any
> radio transmitter to be appropriately licenced? Or is in fact, as
> I have also heard, the _operator_ who must be licenced, not the
> equipment, therefore implying that as long as a licenced operator is in
> the room (or on site), a packet-radio transceiver can be 'used' by
> other parties in the room?

One can set up a receiver only and monitor packet radio traffic very
easily but in my understanding amateur packet radio would not be adequate
for "broadcasting" as is because a) amateurs cannot broadcast and
therefore it is not designed that way and therefore b) the main
protocols used, TCP/IP and AX.25 assume two-way communication and
error correction. I would assume the main problem would be error
correction, i.e. if the "listener" receives a bad packet it cannot
broadcast a message back saying "send it again". That being said I
cannot see it would be difficult to adapt the protocol side to achieve
a broadcast mode like RTTY news stations [come to think of it do any
national amateur organisations broadcast packet news ?].

Licensing would be commercial/government and depend on case and
country. Given the low entry cost and ease of maintenance, packet
does seem a very attractive technology in less developed countries.
--

Mike Collinson
Assistant Manager, Product Engineering Dept., UX Software Development Div.,
NEC Corporation, Daito Tamachi Building, 14-22 Shibaura 4-Chome,
Minato-ku, Tokyo 108, JAPAN

Email: mike@uxp.bs2.mt.nec.co.jp Fax:+81-3-3456-6675
Tel:+81-3-3456-7451
---

329. Re: HAPN packet, what is it?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-21 01:03:16 UTC
From: Carl Makin <makinc@hhcs.gov.au>
Message-ID: <1993Sep21.110316.811@hhcs.gov.au>
Source record: 51615

In article <1993Sep16.080005.11619@ke4zv.atl.ga.us> Gary Coffman, gary@ke4zv.atl.ga.us writes:

> HAPN, Hamilton Area Packet Network. It's the group in Hamilton Ontario
> who run 4800 baud modems.

There are a lot of these running here in Aus now because we built
a compatable modem kit.

It's easier to setup than 9600 (read not as critical) and gets virtually
the same throughput (unless you have *very* fast switching radios).

Carl.
--
Carl Makin (VK1KCM)
makinc@hhcs.gov.au (Internet) / vk1kcm@vk1kcm.act.aus.oc (Amprnet)
"Advertising is the science of arresting human intelligence long
enough to get money from - Stephen Leacock

330. RE: HAPN packet, what is it? (a REAL answer)?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-21 10:13:30 UTC
From: n4hy@wahoo.ccr-p.ida.org
Message-ID: <N4HY.93Sep21101330@wahoo.ccr-p.ida.org>
Source record: 51617

Many people have said words about the HAPN 4800 bps modem but have yet to answer the question. HAPN is 4800 bps duobinary encoding. Let's take zero's and one's and rather than binary digits where OR, AND is the arithmetic, let's pretend they are integers. So they are now zero's and one's as integers. Suppose the sequence of zero's and one's (integers now, not binary digits) is

a1 a2 a3 a4 a5 ...

Let's make a new sequence

b1 = 0

b2 = a2 - a1

b3 = a3 - a2

b4 = a4 - a3

and so on. Notice this is a THREE STATE SIGNAL. It can take on the value -1, 0, and 1.

For example suppose a1 = 1, a2 = 0, a3 = 1, a4 = 1, etc.

Then b1 is 0 by definition.

b2 = a2 - a1 = -1,
b3 = a3 - a2 = 1,
b4 = a4 - a3 = 0

and so on.

You have encoded two symbol's (zero's and one's) using three symbols. Thus you are able to transmit the same information in a more tightly controlled spectrum. This is the controlled and planned use of intersymbol inteference. The reason the HAPN board does not work well is that it is a grossly suboptimal implementation of something that really needs DSP to work well. There is a variant of this scheme where

b2 = a2 - a0,
b3 = a3 - a1,
b4 = a4 - a2,

where now the `delta encoding' is on every other symbol. This is call modified duobinary. This even better spectral properties in that it has the same zero in its spectrum that regular duobinary has but it also has no D.C. component. Now this would work really well through the audio jack of an FM radio. I think we could get 9600 through a mike jack if we use this scheme and a Viterbi decoder. With no audio circuit filter degradation, this would

approach the performance of PSK using an approximate maximum likelihood symbol timing algorithm and the VIterbi decoder. I was working on this before I got the heave ho from AEA. Too bad for you and them.

Bob
--
Robert W. McGwier | n4hy@ccr-p.ida.org
Center for Communications Research | Interests: amateur radio, astronomy,golf
Princeton, N.J. 08520 | Asst Scoutmaster Troop 5700, Hightstown

331. Re: HAPN packet, what is it?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-21 11:39:39 UTC
From: peter@globv1.hacktic.nl
Message-ID: <1993Sep21.113939.8699@globv1.hacktic.nl>
Source record: 51625

eac@world.std.com (Eric A Cottrell) writes:

>The HAPN Modem is a 4800 baud modem put out by a group called HAPN. It's
>advantage over 9600 baud is the audio can be fed into the mic and taken
>from the speaker without modification (or little modification?).

Does anyone know how much bandwidth this modem takes?

Groetjes,
Peter Busser
--
Linux, the choice of a GNU generation.

332. Re: "Digital" to Europe; your thoughts on the best ways?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-21 14:10:08 UTC
From: Borut.B.Lavrencic@ijs.si
Message-ID: <1993Sep21.161008.590@cathy.ijs.si>
Source record: 51618

In article <748533198snx@llondel.demon.co.uk>, dave@llondel.demon.co.uk (David Hough)
writes:
> In article <CDMqrv.on@world.std.com> slm@world.std.com (slm) writes:
>>
>>* TCP/IP. I hear some folks are experimenting with ``encapsulating'' TCP/IP
>>ham messages in Internet to get them ``over the pond,'' which seems nice,
>>fast, and reliable (no worries about solar flares). However, my friend on the
>>other side isn't on TCP/IP (actually, neither am I yet, although I will make
>>the effort to set up and learn if it seems it will be worthwhile). Could
>>this still work? Are there gateways I could use to send messages reasonably
>>fast to Europe? Could I realistically (not awfully slow) telnet via
>>TCP/IP into a BBS in Europe to forward a message? Can I send a TCP/IP
>>message here and have it get reasonably fast to an AX.25 system in Europe?
>>
> You will probably find that even if you could get a message to Europe by
> this method, it would still be fairly slow on the VHF links into Slovenia
^^^^^^^^
> so you wouldn't necessarily gain much over the HF hop to the area. You might
> even find that your message would do a hop or two on HF across Europe anyway.
>
> I don't know of any internet gateways in the UK - licence regs are unclear
> as to whether it is allowed, and chances are someone would have to pay for
> the cost of the internet connection so that makes it even more unlikely.
>
> Dave
> --

An alternative to visit Slovenia in CyberSpace is simply to use this
medium.

--
Borut B. Lavrencic, D.Sc. | X.400 :C=si;A=mail;P=ac;O=ijs;S=lavrencic
J. Stefan Institute | Internet:Borut.B.Lavrencic@ijs.si
University of Ljubljana, | Phone :+ 386 1 159 199
SI-61111 Ljubljana, Slovenia | PGP Public Key available on request

DOLGO SMOIS KALIS OVRAZ NIKEI NJIHK ONCNO ODKRI LIVSE BIBBL

333. Re: Packet to Former Soviet Union???

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-21 18:26:08 UTC
From: mark@ve6mgs.ampr.org
Message-ID: <1993Sep21.182608.28020@ve6mgs.ampr.org>
Source record: 51628

sadams@eis.calstate.edu (Steven Adams) writes:

>Is it possible to send a packet message into the x-Soviet Union?
>Do they have packet radio there??

Yes, and yes. They have people even implementing TCP/IP (Gahsp!)

Take a look in the Amateurs on USENET List under CIS for a set of
contacts to give you more details!

Ciao -- Mark

334. Next generation packet?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-21 19:09:58 UTC
From: macker@itd.nrl.navy.mil
Message-ID: <macker-210993145648@whitefang.itd.nrl.navy.mil>
Source record: 51620

Are there any major contenders for the next generation of amateur packet systems? Most computers (e.g.,MacIntosh MacTCP) can now be outfitted with TCP/IP host functionality and can replace the KISS function supported in present TNCs. High speed modems (>=9600) and radio interfaces to support them seem to be the next step in improving amateur packet services. If anybody has comments/information on these trends please provide. I am a relatively new ham, so excuse my ignorance if these are worn out questions.

Also, has anyone tried TCP/IP header compression(e.g., Van Jacobsen) over amateur radio links and/or UDP multicasting (routing?). A next generation IP standard is evolving and offers some interesting, advanced features which could be applied to packet radio nets. I would love to get involved in this type of amateur experimenting!

-Joe Macker
(call sign in the mail) macker@itd.nrl.navy.mil

335. FTP source for JNOS 1.08

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-21 20:34:02 UTC
From: Burt.Kaufman@f40.n382.z1.fidonet.org
Message-ID: <748742412.AA00129@afarm.uucp>
Source record: 51443

Can anybody point me to a site that has JNOS version 1.08c available for anonymous FTP?

73 Amateur Radio Today columnist Jeffrey Sloman N1EWO writes the "Packet & Computers" column. He's writing a series of columns on getting started with TCP/IP. I've been wanting to do that, so I'd like to follow along. Since he's using JNOS 1.08c, I'd like to get the same version.

I've located a local BBS with a couple of versions of 1.10 <something>. But aside from being beta software, the files appear to take well over an hour to download, and I don't have that much time. (No, I don't want to spend $200 for a high speed modem -- at least not for the telephone!)

If possible, simple instructions on how to initiate the transfer would be helpful as well. I have to get a net.acquaintance to put this on disk for me; neither of us has used Internet for FTP.

Thanks for any help...

Burt N5SYY

... "It's PERVECT, not PERVERT." - Aahz
___ Blue Wave/QWK v2.12

336. Any good intro books on packet radio?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-21 20:37:12 UTC
From: billp@deepspace.East.Sun.COM
Message-ID: <27nolo$aci@dr-pepper.East.Sun.COM>
Source record: 51621

After many years of neglecting my interest in radio, I've drifted back and I'm looking for some good intro type books on the subjects of packet radio and interfacing same with computers. If there's a FAQ for this group, could someone point me at it?

thanks

Bill Pittore - SunSelect, a Sun Microsystems Inc. Business
Chelmsford, MA 01824

bill.pittore@sun.com (508) 442-0310

337. ARRL wants info on Amateur Radio activity above 900 MHz

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-21 21:04:06 UTC
From: ehare@arrl.org
Message-ID: <2284@arrl.org>
Source record: 51622
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.amateur.digital.misc

I have been asked to document Amateur Radio activity in the upper UHF
and microwave bands. I would like to ask our newsgroup readers to
email me information about their equipment and activities on Amateur
frequencies starting with the 902 MHz band.

I would like few levels of responses:

1. A fast report on your equipment and activities. This can include
digital modes, satellite, ATV, etc.

2. Immediate comments about your thoughts on the use of these
frequencies, our future, the direction we are headed, the relative
importance of the different modes (no CW wars, PLEASE!). This can
include summaries of the things you are planning to do (or would
like to do) when you get around to it, or a soapbox of the
way you think things should be.

I will forward this information to several different people here on
staff, for long-term use in our work before the FCC. Out of 45K
readers, I should be able to get quite a few reports. Thanks to all
who respond.

73 from ARRL HQ, Ed
N

Ed Hare, KA1CV ehare@arrl.org
American Radio Relay League
225 Main St.
Newington, CT 06111 "You will never put the puzzle together
(203) 666-1541 - voice if you keep putting all of the pieces
ARRL Laboratory Supervisor back in the box." Colleen
RFI, xmtr and rcvr testing
-----

338. Re: What is digital bandwidth?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-21 21:22:52 UTC
From: barnett@bnr.ca
Message-ID: <27nrbc$qgh@crchh7bb.bnr.ca>
Source record: 51623

Digital bandwidth...hmmmmm.....

The theoretical maximum throughput through a given bandwidth is equal to the number of poles in the data format (2 in TTL, 4 in QPSK...) times the bandwidth in Hertz. Therefore, it would seem that for a 25Kc channel, you could send straight `on-off' data through at 50,000 bits/second. Don't forget to account for filter rolloff at the edges to lose about 10% and unless you have a really good synch algorithm running in the RX end, you will probably have to cut that rate in half.

Realistically, you could get 19.2Kbps out of a 25Kc channel with a low BER (that says little of commercially available cost though...). Digital cellular cruises along at 64Kbps on a 30Kc channel using PI/4 QPSK. Check out some of the TIA standards (IS-54, 54A, 54B, 3D...). They have alot on the data format and rates /wrt bandwidth.

Good luck.

Bobby Barnett | Any opinion stated here is certainly
Bell Northern Research | NOT BNR's...
Cellular Development Team |
barnett@bnr.ca | ...and probably not even mine.
KA4VBF |

339. Re: Motorla MC80 for packet ?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-21 22:05:07 UTC
From: geertj@ica.philips.nl
Message-ID: <1993Sep21.220507.10308@ica.philips.nl>
Source record: 51626

johna@icsbelf.co.uk (John Agnew) writes:

>Hi All,

>I have a Motorola MC80 VHF FM radio that I want to use for packet. Has
>anyone any experience of tuning these radios onto 2m ? I have a manual
>for the radio but it seems that my TX layout is not the same as that of
>the circuit diagrams in the manual. Also I find that now I have tuned the
>RX it is as deaf as a post - any ideas. The radio originally operated
>around 150 Mhz according to the xtals that cam with it when I bought it.
>I do not want to mess with the TX until I have an idea of what I have to
>do.

Well, having modified the 70cm version myself, and heard much about
both versions from others (many of these came loose when they were
replaced at government), I found:
- They work for packet, even HAPN, but the IF is a bit smallish
(but that sounds familiar, no?)
- The receiver uses many helical filters. You need to re-tune very
precisely to obtain maximal results. I remember to obtain something
like .3-.4 uv for 12dB sinad - not bad for a box with this filtering.

Geert Jan

340. 9600 baud signal characteristics.

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-21 22:06:42 UTC
From: andyw@aspen32.cray.com
Message-ID: <1993Sep21.170642.4105@hemlock.cray.com>
Source record: 51624

In anticipation of having to counter some (mis-)conceptions
about 9600 baud packet, I'd like to ask for authoratitive
rebuttals to statements such as:

1. 9600 baud packet will cause adjacent channel interference
(maybe with the kicker that they were told this by ARRL HQ).

2. A data only repeater isn't legal, it has to ID in morse.

As well as any other odd-ball remarks you may have encountered
when trying to put a 9600 baud repeater on the air.

While I feel most points can be countered adequately, I'd like
to collect as much info as possible, before I need it.

Thanks,
--
andyw N0REN/G1XRL

andyw@aspen.cray.com Andy Warner, Cray Research, Inc. (612) 683-5835

341. Re: HAPN packet, what is it? (a REAL answer)?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-21 22:16:32 UTC
From: geertj@ica.philips.nl
Message-ID: <1993Sep21.221632.10501@ica.philips.nl>
Source record: 51627

n4hy@wahoo.ccr-p.ida.org (Bob McGwier) writes:

>You have encoded two symbol's (zero's and one's) using three symbols.
>Thus you are able to transmit the same information in a more tightly
>controlled spectrum. This is the controlled and planned use of intersymbol
>inteference. The reason the HAPN board does not work well is that it
>is a grossly suboptimal implementation of something that really needs DSP to
>work well.

While Bob is right, we found that HAPN works 'reasonable well'. If people
want to sniff at higher speed instead of staying at 1200 baud, you still
might want to try this. In the Netherlands, 4800 baud is often used
and works OK in practice.

You should really try this. The part cost is lower than a modem chip
for 1200 baud, you get 4 times the speed and much more than 4 times
the performance improvement because has a much better carrier
detection than bell202 modem chips (bell 202 modemchip carrier detect
STINKS, ask if you want to know why)..

Geert Jan

342. Re: 9600 baud signal characteristics.

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-22 07:30:20 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1993Sep22.073020.12436@ke4zv.atl.ga.us>
Source record: 51629

In article <1993Sep21.170642.4105@hemlock.cray.com> andyw@aspen32.cray.com (Andy Warner) writes:
>
>In anticipation of having to counter some (mis-)conceptions
>about 9600 baud packet, I'd like to ask for authoratitive
>rebuttals to statements such as:
>
>1. 9600 baud packet will cause adjacent channel interference
> (maybe with the kicker that they were told this by ARRL HQ).

9600 baud does fill the channel out to the edges with more energy
than the average voice user would. So yes, there is a somewhat
greater possibility of adjacent channel interference to receivers
with wide IF filtering.

>2. A data only repeater isn't legal, it has to ID in morse.

All amateur transmitters must follow the ID rules. A data repeater
is no different. It does not have to ID in Morse, though it can.
It's fine to have it ID at 9600 baud with a UI frame every 10 minutes.
This adds almost nothing to the channel loading.

Gary

--
Gary Coffman KE4ZV |"If 10% is good enough | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | for Jesus, it's good | uunet!rsiatl!ke4zv!gary
534 Shannon Way | enough for Uncle Sam."| emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -Ray Stevens |

343. rec.radio.amateur.digital.misc Frequently Asked Questions

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-22 11:12:27 UTC
From: steve@wattres.SJ.CA.US
Message-ID: <radio/digital-faq-1-748696335@wattres.SJ.CA.US>
Source record: 51630
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.info,rec.answers,news.answers

```
Posted-By: auto-faq 2.4
Archive-name: radio/amateur/digital-faq

Frequently Asked Questions for Digital Amateur Radio
(Well, it's still mostly just packet...)

Version 1.18 - Last modified 9/21/93

This document is for unlimited distribution.

Please send corrections and additions to:
digital-faq@wattres.sj.ca.us
Which will expand to a list of people who are familiar with most digital
issues. I hope. ;-)

The Digital Radio FAQ list will be posted on a monthly basis to
rec.radio.amateur.digital.misc, rec.radio.info, rec.answers, and news.answers.
The current version of this document is available via anonymous FTP at
ftp.cs.buffalo.edu.

Many FAQ's, including this one, are available on the archive site
rtfm.mit.edu in the directory pub/usenet/news.answers. The name under
which a FAQ is archived appears in the Archive-Name: line at the top
of the article. This FAQ is archived as radio/amateur/digital-faq.

There is also a mail server on rtfm.mit.edu, which can be addressed as
mail-server@rtfm.mit.edu. For details on how to operate this server,
send a message to that address with the word "help" in the BODY of the
message.

Table of contents:

1 Basic Packet Radio Information
1.1 What is packet radio?
1.2 What is amateur radio?
1.3 What can I do on packet radio?
1.4 Why packet over other digital modes?
1.5 What elements make up a packet station?
TNC (Terminal Node Controller)
Computer or Terminal
A radio
1.6 What do you mean we can all use the same channel?
1.7 What is AX.25 ?
1.8 What is RTTY ?
1.9 What is AMTOR ?
1.10 Definitions: Commonly used terms in Amateur Packet Radio
```

1.11 Do's and Don'ts : Rules and Regulations

2 Computing Network Resources for Amateur Digital radio
2.1 What Newsgroups/mailing lists are available?
2.2 What anonymous FTP sites and mail servers are available?
2.3 How do I contact the ARRL through email?
2.4 Are there any gateways for mail or news
2.4.1 The W2XO Internet mail <-> packet mail gateway
2.4.2 The N0ARY Internet mail <-> full packet BBS gateway
2.4.3 LAN Gateways (Packet wormholes via Internet)

3 Networking and special packet protocols
3.1 Are there any other protocols in use other than AX.25?
3.2 What is TCP/IP?
3.3 Networking Schemes
What are some of those other networking schemes?
Digipeaters
KA-Nodes
NET/ROM
ROSE
3.4 BBS message transfer

1 Basic Packet Radio Information

1.1 What is packet radio?

Packet radio is one method of digital communications via amateur radio. Packet radio takes any digital data stream and sends that via radio to another amateur radio station. Packet radio is so named because it sends the data in small bursts, or packets.

1.2 What is amateur radio?

Amateur Radio (sometimes called Ham Radio) is individuals using specified radio frequencies for personal enjoyment, experimentation, and the continuation of the radio art. Amateur radio operators must be licensed by their government. In the United States, the Federal Communications Commission issues amateur radio licenses. Normally, a test on operating practices, radio theory, and in some cases morse code proficiency test is administered. Amateur radio is not to be used for commercial purposes. Also, amateur radio operators are restricted from using profanity and using amateur radio for illegal purposes.

For more information on Amateur Radio in general, see the monthly frequently asked questions (FAQ) posting in rec.radio.amateur.misc. A copy of that FAQ is also available for FTP from ftp.cs.buffalo.edu and by mail from rtfm.mit.edu.

1.3 What can I do on packet radio?

Keyboard-to-Keyboard contacts:

Like other digital communications modes, packet radio can be used to talk to other amateurs. For those who cannot use HF frequencies, two

amateurs can talk to each other from long distances using the packet radio network.

Packet BBS operations:

Many cities have one or more packet Bulletin Board System (BBS) available on the local packet network. Amateurs can check into the BBSes and read messages from other packet users on almost any topic. BBSes are networked together over the packet network to allow messages to reach a broader audience than just your local BBS users. Private messages may also be sent to other packet operators, either locally or who use other BBSes. BBSes have the latest ARRL, AMSAT, and propagation bulletins. Many BBSes have a file section containing various text files full of information on amateur radio in general.

DX Packet Cluster:

A recent development is use of packet radio for DX spotting. HF operators connect to the local DX Packet Cluster for the latest reports on DX. Often a user will 'spot' some hot DX and distribute the DX report real time.

File Transfer:

With special software, amateurs can pass any binary files to other amateurs. Currently, this is done with TCP/IP communications, YAPP, and other specialized protocols.

Satellite Communications:

Many of the amateur radio satellites contain microcomputer systems that can provide special information to amateurs. Some satellites contain CCD cameras on board and you can download images of the earth and the stars. Others provide store and forward packet mailboxes to allow rapid message transfers over long distances. Some satellites use AX.25, some use special packet protocols developed for satellite communications. A few transmit AX.25 packets over FM transmitters, but most use SSB transmissions.

1.4 Why packet over other digital modes?

Packet has three great advantages over most of the other digital modes: transparency, error correction, and automatic control.

The operation of a packet station is transparent to the end user; connect to the other station, type in your message, and it is sent automatically. The Terminal Node Controller (TNC) automatically divides the message into packets, keys the transmitter and sends the packets. While receiving packets, the TNC automatically decodes, checks for errors, and displays the received messages. In addition, any packet TNC can be used as a packet relay station, sometimes called a digipeater. This allows for greater range by stringing several packet stations together.

Packet radio provides error free communications because of built in error detection schemes. If a packet is received, it is checked for errors and will be displayed only if it is correct.

With VHF/UHF packet, many countries allow packet operators to operate in automatic control mode. This means that you can leave your packet station on constantly. Other users can connect to you at any time they wish to see if you are home. Some TNC's even have Personal BBSes (sometimes called mailboxes) so other amateurs can leave you messages if you are not at home.

The most important advantage of packet over other modes is the ability for many users to be able to use the same frequency channel simultaneously. No other digital mode yet gives this ability.

1.5 What elements make up a packet station?

TNC (Terminal Node Controller): A TNC contains a modem, a CPU, and the associated circuitry required to convert between RS-232 and the packet radio protocol in use. It assembles a packet from some of the data on the serial line, computing an error check (CRC) for the packet, modulates it into audio frequencies, and puts out appropriate signals to transmit that packet over the connected radio. It also reverses the process, translating the audio that the connected radio receives into a byte stream on the RS-232 port.

Most TNC's currently use 1200 BPS (bits per second) for local VHF and UHF packet, and 300 BPS for longer distance, lower bandwidth HF communication. Higher speeds are available for use in the VHF, UHF, and especially microwave region, but they often require unusual hardware and drivers.

Computer or Terminal: This is the user interface. A computer running a terminal emulator program, a packet-specific program, or just a dumb terminal can be used. For computers, almost any phone modem communications program can be adapted for packet use, but there are also customized packet radio programs available.

A radio: For 1200 BPS UHF/VHF packet, commonly available narrow band FM voice radios are used. For HF packet, 300 BPS data is used over single side band modulation. For high speed packet (anything greater than 1200 BPS), special radios or modified FM radios must be used.

1.6 What do you mean we can all use the same channel?

Packet radio uses a protocol called AX.25. AX.25 specifies channel access (ability to transmit on the channel) to be handled by CSMA (Carrier Sense Multiple Access). If you need to transmit, your TNC monitors the channel to see if someone else is transmitting. If no one else is transmitting, then the TNC keys up the radio, and sends its packet. All the other stations hear the packet and do not transmit until you are done. Unfortunately, 2 stations could accidentally transmit at the same time. This is called a collision. If a collision occurs, neither TNC will receive a reply back from the last packet it

sent. Each TNC will wait a random amount of time and then retransmit the packet.

In actuality, a more complex scheme is used to determine when the TNC transmits. See the "AX.25 Protocol Specification" for more information.

1.7 What is AX.25?

AX.25 (Amateur X.25) is the communications protocol used for packet radio. A protocol is a standard for how two computer systems are to communicate with each other, somewhat analogous to using business format when writing a business letter. AX.25 was developed in the 1970's and based of the wired network protocol X.25. Because of the difference in the transport medium (radios vs wires) and because of different addressing schemes, X.25 was modified to suit amateur radio's needs. AX.25 includes a digipeater field to allow other stations to automatically repeat packets to extend the range of transmitters. One advantage of AX.25 is that every packet sent contains the sender's and recipient's amateur radio callsign, thus providing station identification with every transmission.

1.8 What is RTTY?

RTTY (Radio TeleTYpe) is one of the more common communications protocols used in the HF bands. It is a half-duplex, non error-correcting mode that can be used by any number of stations on a frequency in a round-table fashion. Note that transmit/receive switching is manual, so all parties in a roundtable need to agree on who transmits next. It is primarily used for single keyboard-to-keyboard contacts. RTTY uses Baudot character encoding (also known as ITA2), which is a 5 bit code. Those who can do advanced math ;) will note that 5 bits is only 32 possible combinations, which is not enough for a full alphanumeric set, much less mixed-case alphabetics. Baudot (and RTTY) gets around this limitation by defining two "shifts" which switch between a "letters case," and a "figures case." On older RTTY setups (ones which actually use a teletype, for instance), you have to worry about the letters/figures shift. However, most TNCs and multimode digital controllers now do the "Right Thing(TM)" with respect to those shift characters, sending them as necessary for the data being transmitted. Lower case is not used on Baudot RTTY. ASCII can be used in RTTY as well, but it is very uncommon.

1.9 What is AMTOR?

AMTOR (AMateur Teleprinting Over Radio) is an error-correcting protocol used in the HF bands. It uses the same character set as Baudot (ITA2), but is encoded differently, so that each character has a constant mark to space ratio. This constant ratio is how errors are detected. Errors are corrected via either of two methods: ARQ (Automatic Retransmit reQuest), and FEC (Forward Error Correction).

In ARQ mode, exactly two stations connect to each other. The station with data to transmit (also known as the Information Sending Station, or

ISS) transmits 3 characters, and then waits for the other station (called the Information Receiving Station, or IRS) to send back an acknowledgement that those 3 characters were correctly received. This back-and-forth activity makes for the characteristic "chirp-chirp-chirp" of AMTOR ARQ operation. This also means that each transceiver needs to be able to switch from sending to receiving mode fairly quickly. The first time that you operate AMTOR ARQ with a relay-switched rig, you will be convinced that the rig is going to self-destruct. ;)

In FEC mode, one station can communicate with many others at once, since there is no back-and-forth acknowledging of data. FEC gets its error correction from time diversity, which is a fancy way of saying it sends each character twice. Actually, it interleaves the characters, so that the character is not repeated until 4 character times later. An example:
The text string to send is "This is FEC."
What comes out of the controller looks like "ThisThisis Fis FEC._EC._"
The receiving controller looks for which of the characters have a proper mark to space ratio, and prints the one that does. If neither do, it prints an error symbol.

1.10 Definitions: Commonly used terms in Amateur Packet Radio

44 net - The class A network designator for TCP/IP amateur packet radio. All numerical TCP/IP addresses are in the format 44.xxx.xxx.xxx.

AFSK - Audio Frequency Shift Keying. A method of representing digital information by using different audio frequencies modulated on a carrier.

AMPR - Amateur Packet Radio.

ampr.org - The high level domain recognized on Internet for amateur packet radio TCP/IP.

AMTOR - AMateur Teleprinting Over Radio. This protocol allows error-free point-to-point or multicast, single user per channel communications. Usually used on HF, but not VHF or above.

ARQ - Automatic Resend reQuest. This is the point-to-point error correcting mode for AMTOR. It works by sending bursts of 3 characters, and then the other station sends an OK/NotOK code for those 3 characters.

AX.25 - Amateur X.25 protocol. The basis of most packet systems. See section 1.7 for more information.

CRC - Cyclic Redundancy Check. The error detection scheme included in each packet. Verify that the packet was received error free.

CSMA - Carrier Sense Multiple Access. A system allowing many stations to use the same radio frequency simultaneously for packet communications.

digi - Short name for a digipeater

digipeater - A packet radio station used for repeating packets. See section 3.3.1 for more information.

FCC - Federal Communications Commission. Regulates and issues licenses for amateur radio in the United States.

FEC - Forward Error Correction. This is the multicast method of (almost) error-corrected communications on AMTOR. It works by sending each character twice.

FM - Frequency Modulation. The radio modulation scheme used for VHF and UHF packet communications.

FSK - Frequency Shift Keying. A method of representing digital information by shifting the radio carrier frequency different amounts to represent ones and zeros.

HDLC - (High-Level Data Link Control Procedures) A standard for high level link control. (ISO 3309)

KA9Q NOS - (KA9Q Network Operating System) A TCP/IP program originally developed by Phil Karn, KA9Q. Currently there are many different versions available. See section 3.2 for more information.

KA-Node - A simple networking scheme developed by TNC maker Kantronics. See section 3.3.2 for more info.

KISS - Keep It Simple Stupid. A simple interface developed for communications between TNCs and computers. This allows for most of the packet processing to be handled by the computer. Commonly used with packet TCP/IP software.

LAN - Local Area Network. A packet network developed for communications throughout a city or region. Often, the LAN uses separate frequencies from inter-city packet links.

modem - MODulator/DEModulator. Converts the analog signals into a binary data stream (a series of ones and zeros) for the TNC or a micro-computer. First step in decoding packets. It also converts binary data to analog, which is the last step in encoding packets.

NET/ROM - A scheme for packet radio networking. See section 3.3 for more information.

NODE - A network node. Often a network node running NET/ROM.

PPP - Point to Point Protocol. PPP is another protocol used for moving IP frames over a serial line. It supports host authentication, and non-transparent serial lines. It also has a standard way of negotiating header (and potentially data) compression over the line. See also SLIP.

protocol - A standard used for intercommunications between different computer systems.

RS-232 (RS-323C) - A (more or less) standard for interconnection of serial peripherals to small computer systems. In packet radio,

RS-232 is the most common interface between TNC's and the Computer/Terminal.

RTTY - Radio TeleTYpe. This protocol allows point-to-point or multicast, single user per channel communications, without error correction.

SLIP - Serial Line Internet Protocol. A trivial protocol for putting IP frames over a serial line to do (potentially) cheap TCP/IP networking. Approximately the same as KISS, except over wireline networks. See also PPP.

SSB - Single Side Band. The radio modulation scheme used for HF packet and satellite packet communications.

TAPR - Tucson Amateur Packet Radio. Was the first group to create a packet radio TNC using AX.25. Soon a TAPR TNC became cloned by many others. TAPR continues development of packet radio equipment.

TCP/IP - Transmission Control Protocol/Internet Protocol. A set of utility programs used over AX.25. See sections 3.2 for more information.

TNC - Terminal Node Controller. See section 1.5 for more information.

1.12 Do's and Don'ts : Rules and Regulations

NOTE: These regulations apply only to amateurs regulated by the FCC (United States), but often are similar to regulations in other countries.

[Since I have no experience with amateur radio in other countries, I cannot make any comments. Please bring any notable exceptions to my attention. -ed]

Although there are no specific rules that apply to amateur packet radio, the general amateur radio rules force some restrictions on packet usage.

Can I set up a TNC at home and one at work so I can check my Electronic mail via packet?

This cannot be done without special restrictions. Amateur radio rules prohibit any business. Since you could have mail from your boss (or maybe even someone selling you something over Internet), that would constitute business activity and is specifically prohibited.

Profanity can also be a complication. Since you have no control over the language used in E-mail, proper filtering is required. Since no filter scheme can catch every offense, it is best to say every message must be hand filtered.

I would like to set up a packet radio gateway between a land line computer network and the packet network. Is this possible?

Yes, and there are several such gateways in use, but they must be managed with caution. Electronic mail may be passed FROM the packet network INTO the land line network without intervention. However, mail passed TO packet radio is considered third party traffic (the sender is not an amateur) and these messages must be hand filtered to ensure that rules of message content are followed.

It's my license if I use packet radio illegally anyway, so what does anyone else care!?

Packet radio is one of the few NETWORKED systems in amateur radio. Many people have helped develop the network and there are many amateurs who own parts of the packet radio network. Sending packet BBS mail, digipeating, and sharing the channel involves the licenses of MANY people. Because of FCC rules stating that anything to come out of a transmitter (either in automatic mode or via your direct control) is the licensee's responsibility, one illegal message sent over the packet radio network could literally jeopardize the licenses of thousands of other amateurs. When in doubt, it is best to check with other amateurs about sending the message before it is sent.

I have some ideas on how to use packet radio in a new way, but I don't know if it is legal. Who could tell me if I can do it legally?

The worst thing you can do is talk to the FCC about such an issue. The FCC rules are written to be general enough to encompass but not restrict new radio activities. In the past, any non-thought-out requests sent to the FCC have meant a reduction of privilege for all amateur radio operators.

The best source for legal assistance is your national amateur radio association. In the United States, that is the American Radio Relay League (ARRL). Another good place for such conversations is over Usenet/packet mailing lists, or the amateur radio BBS network.

2 Computing Network Resources for Amateur Packet radio

This section summarizes the resources available on Internet for amateur packet radio operators.

2.1 What Newsgroups/mailing lists are available?

This is a list of all groups that regularly discuss amateur packet radio. For newsgroups, join the group through use of your news reader. For mailing lists, add a '-request' to the end of the list name to request subscriptions. For listserv groups, send mail to 'listserv' at the node which contains the list. The first line of the mail should be 'SUBSCRIBE groupname yourname'. Send the command 'help' for more information.

rec.radio.amateur.packet (Newsgroup): General discussions involving Packet Radio. This group was deleted on 21 September 93!

rec.radio.amateur.digital.misc (Newsgroup): General discussions about all aspects of digital transmissions over Amateur Radio. This group is a replacement for rec.radio.amateur.packet.

rec.radio.amateur.equipment (Newsgroup): May contain disuccsions about equipment related to digital amateur radio, specifically HF rigs that are good for HF digital modes, and the like.

rec.radio.amateur.homebrew (Newsgroup): Contains discussions on making your own gear, which includes packet, AMTOR, and RTTY equipment.

rec.radio.amateur.misc (Newsgroup): General amateur radio discussion. Usually does not contain any particular information about Digital Amateur Radio.

rec.radio.amateur.policy (Newsgroup): Discussion of regulation policies regarding every aspect of amateur radio. Occasionally deals with policies of packet coordination and legal issues of packet radio.

rec.radio.swap (Newsgroup): General For-Sale for any radio equipment. Occasionally will have packet equipment for sale. Recommended location for any amateur packet radio for-sale items.

info-hams@ucsd.edu (Listserv group): A digest redistribution of the rec.radio.amateur.misc Usenet discussion.

ham-digital@ucsd.edu (Listserv group): A digest redistribution of the rec.radio.amateur.digital.misc Usenet discussion.

ham-policy@ucsd.edu (Listserv group): A digest redistribution of the rec.radio.amateur.policy Usenet discussion

hs-modem@wb3ffv.ampr.org (Mailing list): Discussion of high speed modems and radios available and future plans. Also includes discussion of networking using high speed modems. This list is not very active.

tcp-group@ucsd.edu (Mailing list): Group discussion of technical developments of TCP/IP over packet radio and use of the NOS TCP/IP programs.

gateways@uhm.ampr.org (Mailing list): Discussion of current gateways and future plans for gateways. May deal with sensitive internetworking issues.

listserv@knuth.mtsu.edu has several interesting mailing lists available:

GRAPES-L Discussions with GRAPES (Georgia Radio Amateur Packet Enthusiasts Society) on 56kb WAN's and the WA4DSY 56kb RF modem that they distribute.

TENNET-L Tennessee's efforts at a coordinated high-speed RF packet network

GRACILIS-L Discussions on Gracilis tcp/ip packet equipment. Includes some of the people from Gracilis.

KA9Q-UNIX Discussions on porting and using various versions
of KA9Q Unix/Xenix NET/NOS under any of a variety
of Unix/Xenix variants.

TNV-HAMS General discussions amoung email connected
amateur radio operators in and surrounding
Tennessee

Send a message with a body of "HELP" to get help from the list server. Also,
Internet users may now INTERACTIVELY work with the ListServ there by:

telnet knuth.mtsu.edu 372

or

telnet 161.45.1.1 372

For all lists at ucsd.edu, archives may be found via anonymous FTP at
ucsd.edu. Some listserv groups also have archives. Send the command
'help' to the group's listserv for more information. Digest mailings
for the ucsd.edu discussions are also available. Send mail to
listserv@ucsd.edu with the first line being 'longindex' for more
information.

Terry Stader (KA8SCP) <tstader@aol.com> maintains a list of Mac
packet-related software, and posts it periodically (somewhat less often
than monthly) to rec.radio.amateur.digital.misc.

Carl Trommel <carl@codewks.nacjack.gen.nz> posts the weekly news bulletin
of the ZL Data Group to rec.radio.amateur.digital.misc. This bulletin
covers the current happenings in New Zeland's packet network.

There appears to be a mailing list about NOS on hydra.carleton.ca, but
I don't have much more detail. Send a message to
nos-bbs-request@hydra.carleton.ca. The list name is nos-bbs@hydra.carelton.ca.

2.2 What anonymous FTP sites and electronic mail servers are available
for getting packet radio information and programs?

This is a sampling of FTP sites that carry amateur packet radio related
files. Consult the Archie archive server for info on locating
particular files. For more information on using archie, send mail to
archie@cs.mcgill.edu with the line 'help'.

ucsd.edu

Primary distribution site of KA9Q's derived TCP/IP packages. Also,
general packet radio information in the /hamradio/packet subdirectory.

wsmr-simtel20.army.mil

Very large collection of amateur radio software. Note that there are
persistent rumors about Simtel20 going away for budgetary reasons.

wuarchive.wustl.edu

Mirror site of Simtel20 archives. Unix directory structure, which is
easier to use then the simtel20 archive.

ftp.cs.buffalo.edu

Supplimental archive site for amateur radio information. Contains
current copies of all rec.radio.amatuer.* FAQ's.

tomcat.gsfc.nasa.gov

Packet software including Baycomm, ROSE, G8BPQ, NOS, etc.
(I have one report (from George Hitz, W1DA) that this FTP site will be
down until the end of this summer, 1993. Reportedly the site admin is
going to be in Sweden.)

akutaktak.andrew.cmu.edu

SoftKiss for the Mac, in /aw0g. Requires NET/Mac.
SoftKiss is an init/cdev/driver that allows a MAC to do packet using
a Poor Man's Packet modem.

sumex-aim.stanford.edu

NET/Mac is the port of KA9Q's NET program. It doesn't have nifty features
like scrolling or saving the windows, but the individual sessions can be
recorded into a file.

As for mail servers, there is only one that I know of at the moment:

Ham-Server@GRAFex.Cupertino.CA.US

This mail server, which is run by Steve Harding (KA6ETB), has a wide
variety of information on most aspects of amateur radio, not just digital
modes. Send a message with the body HELP to get a fairly useful listing.
Also note that Steve posts the index from the server approximately weekly
to rec.radio.amateur.misc, rec.radio.amateur.digital.misc, and sbay.hams.

2.3 How do I contact the ARRL via electronic mail?

There are various addresses at ARRL HQ, but the most important one is
probably info@arrl.org. That is where general information about the
ARRL can be acquired. This address reaches a person, so you'll have
to specify what/who you're looking for.

2.4 Are there any gateways for mail or news between Internet and
Amateur Packet radio?

Internet / Packet Radio BBS Gateways

There are currently two comprehensive gateways between the Internet and
the packet radio BBS system. One is run by Jim Durham, W2XO, in Pennysylvania
and the other, which allows access to PBBS bulletins, as well as mail,
is run by Bob Arasmith, N0ARY, in California.

2.4.1 The W2XO Gateway

To mail from Internet to Packet:

1. Mail to: "bbs@w2xo.pgh.pa.us"

2. Make the first line of the text a Packet BBS "send" command, ie:
SP TOCALL @ BBSCALL.ROUTING-HINTS < FROMCALL

3. The "subject" line of the Internet mail becomes the "title" line
of the Packet BBS mail.

NOTE: Because of FCC regulations, Jim must hand filter each message
sent FROM Internet TO the Amateur Packet Radio BBS system. Messages
should be of minimal length and appropriate content. Read Section 1.9
(Do's and Don'ts: Rules and Regulations) regarding appropriate usage of
packet radio for more information. Always include the routing hints
with the BBS callsign.

To mail from Packet to Internet:

1. The amateur radio operator must have his callsign registered in
the gateway alias list. If you want to mail from packet to a specific
amateur on Internet, send mail to 'durham@w2xo.pgh.pa.us' (Internet) or
'W2XO @ W2XO.#WPA.PA.USA.NOAM' (Packet BBS mail) with his/her amateur
callsign and their Internet address.

2. Once the above is accomplished, packet BBS mail should be sent to
'CALL @ W2XO.#WPA.PA.USA.NOAM'. The mail will automatically be
forwarded to the Internet address of the amateur with the 'CALL'
callsign.

Jim Durham's Internet address is 'durham@w2xo.pgh.pa.us'.

2.4.2 The N0ARY Internet mail <-> full packet BBS gateway

Bob Arasmith, N0ARY, runs a gateway between the Internet mail system and
PBBS system. His gateway allows you to read, post, and respond to other
postings on the PBBS system via email. For more information, send mail
to gateway_info@arasmith.com.

2.4.3 LAN Gateways (Packet wormholes via Internet)

Currently a group of amateurs are experimenting with connecting packet
LANs together via Internet IP inside IP Encapsulation. Some of the
gateways only accept TCP/IP packets, others AX.25 packets. These
gateways uses the Internet as a transport medium, thus it is impossible
to access the packet radio network from Internet. For more
information, join the Gateways mailing list by sending mail to
"gateways-request@uhm.ampr.org".

3 Networking and special packet protocols

This is a sample of some of the more popular networking schemes
available today. By far, there are more customized networking schemes
used than listed. Consult your local packet network guru for specific
network information.

3.1 Are there any other protocols in use other than AX.25?

AX.25 is considered the defacto standard protocol for amateur radio use and is even recognized by many countries as a legal operation mode. However, there are other standards. TCP/IP is used in some areas for amateur radio. Also, some networking protocols use other packet formats than AX.25.

Often, special packet radio protocols are encapsulated within AX.25 packet frames. This is done to insure compliance with regulations requiring packet radio transmissions to be in the form of AX.25. However, details of AX.25 encapsulation rules vary from country to country.

3.2 What is TCP/IP?

TCP/IP stands for Transmission Control Protocol/Internet Protocol. This is commonly used over the Internet wired computer network. The TCP/IP suite contains different transmission facilities such as FTP (File Transfer Protocol), SMTP (Simple Mail Transport Protocol), Telnet (Remote terminal protocol), and NNTP (Net News Transfer Protocol)

TCP/IP doesn't use all of the AX.25 protocol. Instead, it uses special AX.25 packets called Unnumbered Information (UI) packets and then puts its own special protocol (called IP) on top of AX.25. This is used to increase efficiency of its transmissions, since IP does not require packets to be "reliable", that is to say, guaranteed delivered error-free. TCP handles the retransmission of lost and garbled packets in its own way, at a higher level. Therefore the extra information in an AX.25 "VC" (virtual circuit) frame is not useful, and thus consuming needed bandwidth.

The KA9Q NOS program (also called NET) is the most commonly used version of TCP/IP in packet radio. NOS originally was written for the PC compatible. However, NOS has been ported to many different computers such as the Amiga, Macintosh, Unix, and others. Smaller computers like the Commodore 64 and the Timex-Sinclar do not currently have version of NOS available.

3.3 Networking Schemes

What are some of those other networking schemes?

During the early days of amateur packet radio, it became apparent that a packet network was needed. To this end, the following packet network schemes where created.

Digipeaters

The first networking scheme with packet radio was Digipeaters. Digipeaters would simply look at a packet, and if its call was in the digipeater field, would resend the packet. Digipeaters allow the extension of range of a transmitter by retransmitting any packets addressed to the digipeater.

This scheme worked well with only a few people on the radio channel. However, as packet became more popular, digipeaters soon were clogging

up the airwaves with traffic being repeated over long distances. Also, if a packet got lost by one of the digipeaters, the originator station would have to retransmit the packet again, forcing every digipeater to transmit again and causing more congestion.

KA-Nodes

Kantronics improved on the digipeater slightly and created KA-Nodes. As with digipeaters, KA-Nodes simply repeat AX.25 frames. However, a KA-Node acknowledges every transmission each link instead of over the entire route. Therefore, instead of an end-to-end acknowledgement, KA-Nodes allow for more reliable connections with fewer timeouts, because acknowledgments are only carried on one link. KA-Nodes therefore are more reliable than digipeaters, but are not a true network. It is similar like having to wire your own telephone network to make a phone call.

NET/ROM

NET/ROM was one of the first networking schemes to try to address the problems with digipeaters. A user connects to a NET/ROM station as if connecting to any other packet station. From there, he can issue commands to instruct the station to connect to another user locally or connect to another NET/ROM station. This connect, then connect again, means that to a user's TNC, you are connected to a local station only and its transmissions do not have to be digipeated over the entire network and risk loosing packets. This local connection proved to be more reliable.

NET/ROM is a commercial firmware (software put on a chip) program that is used as a replacement ROM in TAPR type TNC's. Other programs are available to emulate NET/ROM. Among them are TheNet, G8BPQ node switch, MSYS, and some versions of NET.

NET/ROM nodes, at regular intervals, transmit to other nodes their current list of known nodes. This is good because as new nodes come on-line, they are automatically integrated in the network. However, if band conditions such as ducting occur, ordinarily unreachable nodes can be entered into node lists. This causes the NET/ROM routing software to choose routes to distant nodes that are impossible. This problem requires users to develop a route to a distant node manually defining each hop instead of using the automatic routing feature.

ROSE

ROSE is another networking protocol derived from X.25. Each ROSE node has a static list of the nodes it can reach. For a user to use a ROSE switch, he issues a connect with the destination station and in the digipeater field places the call of the local rose switch and the distant rose switch the destination station can hear. Other then that, the network is completely transparent to the user.

ROSE's use of static routing tables ensures that ROSE nodes don't attempt to route packets through links that aren't reliably reachable, as NET/ROM nodes often do. However, ROSE suffers from the inability to automatically update its routing tables as new nodes come online. The operators must manually update the routing tables, which is why ROSE networks require more maintainance.

3.4 BBS message transfer

Many of the BBS programs used in packet radio allow for mail and bulletins to be transferred over the packet radio network. The BBSes use a special forwarding protocol developed originally by Hank Oredsen, W0RLI.

Besides full service BBSes, many TNC makers have developed Personal BBS software to allow full service BBSes to forward mail directly to the amateur's TNC. This allows operators to receive packet mail at night and avoid tying up the network during busy hours.

--
Steve Watt KD6GGD Packet: KD6GGD @ N0ARY.#NOCAL.CA.USA.NA
ICBM: 121W 56' 53.1" / 37N 20' 16.7" Internet: steve@wattres.SJ.CA.US
Never trust a computer bigger than you can lift. also news,root,sys,uucp,...

344. BKMULTY: looking for views/reviews

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-22 15:42:40 UTC
From: rdewan@casbah.acns.nwu.edu
Message-ID: <27prpg$3c9@news.acns.nwu.edu>
Source record: 51631
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc

I am considering to buy a copy of BK-MULTY software from
AC4IW for RTTY/AMTOR with my TU (HD3030, TU470 compatible).
I am looking for any views/reviews of it or similar software.

Any comments, especially with its compatibility with Windows,
will be greatly appreciated.

Rajiv
aa9ch
r-dewan@nwu.edu

345. *** NEED info on RADIO MODEMS ***

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-22 16:24:33 UTC
From: alai@balboa.eng.uci.edu
Message-ID: <2CA07C41.12699@news.service.uci.edu>
Source record: 51634

Hi Everyone,

I would like to know if there is anyone who knows where I can find radio modems. Radio Modems are similar to regular modems, but it sends radio signal off an attached antenna rather than a phone line. I will appreciate any clue. Thank you for your attention.

Anthony Lai

346. [HELP] 9600baud to ICOM IC-970

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-22 20:45:56 UTC
From: srbible@cs.nps.navy.mil
Message-ID: <CDrwCK.As6@taurus.cs.nps.navy.mil>
Source record: 51632

Has anyone interfaced a 9600 baud packet modem to the ICOM IC-970?
I have the Pac-Comm NB-96 and PSK-1. I have everything working,
i.e. PSK with the microsats and regular land packet. I would
like to modify the IC-970 for the 9600 baud modem in order to
receive UO-22 and KO-23 in addition to the PSK modem. It appears
that I'll have to make a switch box to switch between 1200 baud
(the mic and speaker connections) and the 9600 baud (the internal
radio connection).

I've been pouring over the schematic for the radio and have an
idea what I need to do. I would like very much to talk with
someone who has done the radio hookup.

73, Steve N7HPR

Steven R. Bible, LT, USN Home Phone: (408) 644-0305
Student, Naval Postgraduate School Work Phone: (408) 656-2174
Monterey, California 93943 DSN: 868-2174

internet: srbible@cs.nps.navy.mil
amprnet: N7HPR@K6LY.#NOCA.CA.USA.NA

347. TAPR-1990 and 1993 meeting

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-22 21:44:36 UTC
From: kkrallis@leon.nrcps.ARiadne-t.GR
Message-ID: <9309222144.AA10285@leon.nrcps.ariadne-t.gr>
Source record: 51633

I am looking for the TAPR'90 and TAPR'93 meetings proceedings. I have
managed to find only years 1989, 1991 and 1992. Anybody knows where
to look for years 1990 and 1993?

73 Costas SV1XV

| Dr. K. Krallis, SV1XV * Research Engineer
| Metallurgy Lab., National Technical University of Athens
| ------
| Internet: kkrallis@leon.nrcps.ariadne-t.gr [143.233.2.1]
| Packet radio: sv1xv@sv1uy.ath.grc.eu
| AMPRnet: sv1xv@sv1xv.ampr.org [44.154.1.11]
| Snail Mail: P.O.BOX 3066, GR-10210 Athens, GREECE
---

348. Any experience from delta modulation??

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-22 22:43:19 UTC
From: lakki@krk.fi
Message-ID: <1993Sep22.224319.8415@krk.fi>
Source record: 51636

Have anyone tried delta modulation for digital communication?? Motorola
has a codec for Slope delta modulation, which can handle low bit rates,
and is especially designed for them.
All e-mail appreciated.

/Erik
--
E R I K F I N S K A S OH2LAK
---------------------------------- R A
InterNet: Erik.Finskas@krk.fi RADIO AMATEUR
Lakki@krk.fi D HAM A
Lakki@cute.cute.fi I T RADIO
Amateur Packet: OH2LAK@OH2RBJ.FIN.EU O E I
---------------------------------- U O
H A M R A D I O R
T H E R E A L T H I N G

349. Re: BKMULTY: looking for views/reviews

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-23 01:22:25 UTC
From: fmitch@netcom.com
Message-ID: <fmitchCDs95E.1AL@netcom.com>
Source record: 51635
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc

Rajiv Dewan (rdewan@casbah.acns.nwu.edu) wrote:
: I am considering to buy a copy of BK-MULTY software from
: AC4IW for RTTY/AMTOR with my TU (HD3030, TU470 compatible).
: I am looking for any views/reviews of it or similar software.

: Any comments, especially with its compatibility with Windows,
: will be greatly appreciated.

: Rajiv
: aa9ch
: r-dewan@nwu.edu

hi mitch, wa4osr in mobile, alabama... i have a friend, k4bvg who has
bk-multy... he thinks highly of it... he is using it with an old hal
dumb modem and has nothing but praise for it... the software is very
sophisticate and k4bvg (who is an excellent programmer himself) says
that the bmk fellow really knows what he is doing with the software...
and i understand that bmk now has a pactor license so he is pointing
out all of the pactor problems to the pactor fellows in germany... hi...
unfortunately k4bvg is not on the internet yet, but i am sure he would
tell you the software is excellent and well worth the price...
73... mitch

--
fmitch@netcom.com
Felton Mitchell, WA4OSR in Mobile, Alabama USA
co-sysop for W4IAX bbs running fbb ... sysop for WA4OSR DXCluster in Mobile..

350. info about MD2 and password

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-23 07:41:59 UTC
From: guercile@c700-3.sm.dsi.unimi.it
Message-ID: <27rk07$bbf@c700-3.sm.dsi.unimi.it>
Source record: 51637

I'd wish to have any info about MD2 for the password on BBS, like
FBB 5.15 and so on.

Thanks

Federico Guercilena guercile@ghost.dsi.unimi.it

Dipartimento Scienze dell'informazione
Universita' di Milano
---

351. Morse decoder for Mac??

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-23 10:57:13 UTC
From: marcbg@feenix.metronet.com
Message-ID: <CDszrD.80y@feenix.metronet.com>
Source record: 51638

Are there any Morse decoder systems, especially for the Mac, which do not require a multi-mode TNC? Something a little cheaper?

Thanks in advance!

--
Marc B. Grant, N5MEI | marcbg@metronet.com | 214/231-3998 (voice)
P.O Box 850472 | marcbg@esy.com | 214/231-0025 (fax)
Richardson, TX 75085 | |
"A billion here, a billion there, it starts to add up to real money" - HL Hunt

352. Re: BKMULTY: looking for views/reviews

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-23 12:21:11 UTC
From: gary@vulcan.com
Message-ID: <1PuBac1w165w@vulcan.com>
Source record: 51495
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc

rdewan@casbah.acns.nwu.edu (Rajiv Dewan) writes:

> I am considering to buy a copy of BK-MULTY software from
> AC4IW for RTTY/AMTOR with my TU (HD3030, TU470 compatible).
> I am looking for any views/reviews of it or similar software.
>
> Any comments, especially with its compatibility with Windows,
> will be greatly appreciated.
>
> Rajiv
> aa9ch
> r-dewan@nwu.edu

Well, I have been using BMKMULTY for about 2 years, and I like it. Oneth air QSO's with other hams that use BMKMULTY generally indicate that they favor it over multi-mode controllers, but I don't have a multi-mode controller to compare it to. It provides a low cost way to get into AMTOR, and now PACTOR. It has some neat features, like mode-specific setups and automatic call sign detection.

My two cents worth ...

73 de ko4cy
gary@vulcan.com

353. Re: Any experience from delta modulation??

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-23 12:27:27 UTC
From: gary@vulcan.com
Message-ID: <g1uBac2w165w@vulcan.com>
Source record: 51496

lakki@krk.fi (Erik Finskas) writes:

> Have anyone tried delta modulation for digital communication?? Motorola
> has a codec for Slope delta modulation, which can handle low bit rates,
> and is especially designed for them.
> All e-mail appreciated.
>
> /Erik
> --
> E R I K F I N S K A S OH2LAK
> ---------------------------------- R A
> InterNet: Erik.Finskas@krk.fi RADIO AMATEUR
> Lakki@krk.fi D HAM A
> Lakki@cute.cute.fi I T RADIO
> Amateur Packet: OH2LAK@OH2RBJ.FIN.EU O E I
> ---------------------------------- U O
> H A M R A D I O R
> T H E R E A L T H I N G

I have tried delta modulation using the Motorola chips. I didn't put it out on the air, but simply tied the data leads together and tested the back-to-back arrangment at various sample rates. My results were disappointing. To get any quality voice, the sample rate had to be above about 40 kilo-samples/sec. I dropped the project at that point.

Good luck de ko4cy
gary@vulcan.com

354. Icom IC-25a and Tandy HTX-202 to 9600 baud ?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-23 13:04:47 UTC
From: cmwdr01@nt.com
Message-ID: <cmwdr01.13.000814A9@nt.com>
Source record: 51639

Has anyone modified an Icom IC-25a and/or a Tandy HTX-202 to run 9600 baud
packet?
What were the changes and how well did it work.

==========
Dave Redfearn, SR PC LAN Analyst Northern Telecom RTP, NC.
ph.(919) 992-3925 email: cmwdr01@nt.com qrl? de N4ELM/qrp

All opinions are my own and do not necessarily reflect the views of
my employer, co-workers or any other person, living or dead.

355. Re: rec.radio.amateur.digital.misc Frequently Asked Questions

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-23 13:41:22 UTC
From: dbraun@ilx049.intel.com
Message-ID: <27s922$16gp@ilx018.intel.com>
Source record: 51491

Does anyone have a description of PACTOR that they could contribute
to the FAQ? I am curious about this mode, but none of the books
I have (e.g. ARRL Operating Manual) mentions it.

--

Doug Braun Intel Israel, Ltd. M/S: IDC1-41
Tel: 011-972-4-655069 dbraun@inside.intel.com

356. Re: Any experience from delta modulation??

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-23 13:49:10 UTC
From: henrys@feenix.metronet.com
Message-ID: <CDt7pz.AtM@feenix.metronet.com>
Source record: 51490

Erik Finskas (lakki@krk.fi) wrote:

: Have anyone tried delta modulation for digital communication?? Motorola
: has a codec for Slope delta modulation, which can handle low bit rates,
: and is especially designed for them.
: All e-mail appreciated.

: /Erik

Help me on this Erik, I thought codecs and Delta Modulation was used
primarily for PCM encoded voice.

__... ...__

Henry.

--
Henry B. Smith - NA5K | henrys@feenix.metronet.com
1380 Camino Real | Home phone (214) 562-3049
McKinney, TX 75069 | Office phone (214) 333-6077

357. Re: BKMULTY: looking for views/reviews

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-23 14:06:47 UTC
From: "F. Kevin Feeney" <fkf1@cornell.edu>
Message-ID: <27sahoINN3n7@newsstand.cit.cornell.edu>
Source record: 51492
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc

In article <27prpg$3c9@news.acns.nwu.edu> Rajiv Dewan,
rdewan@casbah.acns.nwu.edu writes:
>Any comments, especially with its compatibility with Windows,
>will be greatly appreciated.
>

I have a friend who runs it for RTTY and AMTOR and
and says it's the best he's ever used. Based on that
I got the pactor software (via Schnedler), and while I
haven't had a chance to use it much yet (have to
build a ttl to rs232 for my CP1 first) I have
haywired things enough to copy a little with it
and it works even on a 4.77 mhz machine. The
docs seem well written and I expect good
results when I actually get to it. I have seen
the amtor and rtty stuff run, but haven't used it
myself - seemed to run well.

If the pactor works as well as I think it will, I
will go back and get the rest of the package.

BTW, I don't think it runs under windows or
OS/2. Most of this kind of software, PMP, Baycom,
and various RTTY programs require direct access
to the timing hardware which these GUI programs
get in the way of. With something like a morse
trainer you have enough speed to deal with that
and find a way around, but for realtime digital
reception you pretty much need direct access to
the machine, not through a layer of unpredictable
code.

YMMV

73 de Kevin, WB2EMS

358. X1J

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-23 15:36:43 UTC
From: mitchell@sosc1.sosc.osshe.EDU
Message-ID: <9309231556.AA05227@ucsd.edu>
Source record: 51493

I installed X1J in a TNC2 yesterday and it seems to hang during the start up sequence. I have to switch the power on an off several times before the tnc starts properly. The clock rate is 4.9MHz, I've got 32K RAM and 200ns 27512's. After it starts, the node seems to run fine...

I've tried two TNC's and both behave exactly (:-) the same....

Thanks
Stu

359. Re: X1J

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-23 16:36:12 UTC
From: mcduffie@unlinfo2.unl.edu
Message-ID: <27sj9s$5rr@crcnis1.unl.edu>
Source record: 51494

mitchell@sosc1.sosc.osshe.EDU writes:

>I installed X1J in a TNC2 yesterday and it seems to hang during the start
>up sequence. I have to switch the power on an off several times before the
>tnc starts properly. The clock rate is 4.9MHz, I've got 32K RAM and 200ns
>27512's. After it starts, the node seems to run fine...

>I've tried two TNC's and both behave exactly (:-) the same....

>Thanks
>Stu

I have three of them running and have had no problems with them. There are also J nodes to the west of me in Wyoming that are working fine. I would try burning new chips. Also, be certain that you are pulling the battery jumper and leaving the power off for AT LEAST 2-3 minutes to allow the other code to be lost. Yes, I have seen some retain data for up to 2 minutes of no power and no battery. Just to be safe (not even sure if this works), I like to do a reset after I power the unit up the first time and before I program in the locked-high routes and info string.

73, Gary

P.S. I have mine in: (2) MFJ 1270b/1274 and (1) PacComm Tiny-2

360. TRS-80

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-23 18:50:49 UTC
From: johnz@utxvms.cc.utexas.edu
Message-ID: <1993Sep23.125049.1@utxvms.cc.utexas.edu>
Source record: 51497

I have an old TRS-80 that I would like to use for digital. I know that software was once available for this. Does anyone know where I could find same? Also TNC plans?
Thanks close

361. Re: X1J

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-23 19:08:02 UTC
From: dave@llondel.demon.co.uk
Message-ID: <748836482snx@llondel.demon.co.uk>
Source record: 51498

In article <9309231556.AA05227@ucsd.edu> mitchell@sosc1.sosc.osshe.EDU writes:
>I installed X1J in a TNC2 yesterday and it seems to hang during the start
>up sequence. I have to switch the power on an off several times before the
>tnc starts properly. The clock rate is 4.9MHz, I've got 32K RAM and 200ns
>27512's. After it starts, the node seems to run fine...
>
>I've tried two TNC's and both behave exactly (:-) the same....
>
I assume you are using Z80B chips and not Z80A ones? Some of the A devices
won't run at 4.9152MHz, and from what I have seen of many TNCs, they are
the devices fitted as default (although with the clock jumper set to
2.4576MHz).

All my local X1J nodes appear to be OK so far........

Dave
--

****
* G4WRW @ GB7WRW.#41.GBR.EU AX25 * Start at the beginning. Go on *
* dave@llondel.demon.co.uk Internet * until the end. Then stop. *
* g4wrw@g4wrw.ampr.org Amprnet * (the king to the white rabbit) *
****

362. Re: X1J

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-23 23:07:10 UTC
From: glenne@sad.hp.com
Message-ID: <CDtxJz.LxE@srgenprp.sr.hp.com>
Source record: 51499

I'd be very appreciative if someone would do a digital loopback
test while increasing the speed to see how fast X1J will go.
I'm currently using standard AX.25 TNC code in 10MHz Tiny2s to
control several high speed radios. Currently I'm cpu/code bound
to a maximum of only 38.4 kbps. I'd very much like to know if X1J
can do this fast or better (or half this with standard 5M clock).
I'd much prefer the functionality of X1J if it is at least as good.

Thanks in advance for any help.

Glenn Elmore n6gn

N6GN @ K3MC
amateur IP: glenn@SantaRosa.ampr.org
Internet: glenne@sr.hp.com

363. Re: Any experience from delta modulation??

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-23 23:53:39 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1993Sep23.235339.22514@ke4zv.atl.ga.us>
Source record: 51503

In article <CDt7pz.AtM@feenix.metronet.com> henrys@feenix.metronet.com (Henry B Smith) writes:
>Erik Finskas (lakki@krk.fi) wrote:
>: Have anyone tried delta modulation for digital communication?? Motorola
>: has a codec for Slope delta modulation, which can handle low bit rates,
>: and is especially designed for them.
>: All e-mail appreciated.
>
>Help me on this Erik, I thought codecs and Delta Modulation was used
>primarily for PCM encoded voice.

They are Henry. This is digital.*misc*, we can talk about such things here.

In response to Erik, I looked into these chips, bit rates as low as 2400 bps are possible with compression. Considering that current 2400 bps modems take up the same bandwidth as analog voice, there's little gain to be had here.

When Dale Heatherington was testing the 56kb modem, he ran straight codecs with no compression for mobile digital voice. The quality was very good until the BER got really bad, then the signal fell apart abruptly. With delta modulation, certain kinds of bit errors are more of a problem. With many compression schemes, bit errors are disasterous.

For non-realtime voice mail, our normal packet schemes work well, but our ARQ protocols and channel sharing make realtime digital voice a problem. Realtime voice works better with a stream protocol that implements FEC.

Gary

--
Gary Coffman KE4ZV |"If 10% is good enough | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | for Jesus, it's good | uunet!rsiatl!ke4zv!gary
534 Shannon Way | enough for Uncle Sam."| emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -Ray Stevens |

364. Re: rec.radio.amateur.digital.misc Frequently Asked Questions

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-23 23:57:31 UTC
From: brian@nothing.ucsd.edu
Message-ID: <27td5bINN9ku@network.ucsd.edu>
Source record: 51500

```
Just a minor correction to the FAQ answers: the PACKET-RADIO@UCSD.EDU
discussion list still exists and thrives; it's just not connected to the
old usenet REC.RADIO.AMATEUR.PACKET newsgroup any more.
- Brian
```

365. Re: rec.radio.amateur.digital.misc Frequently Asked Questions

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-24 00:56:49 UTC
From: pschleck@cwis.unomaha.edu
Message-ID: <pschleck.748832209@cwis>
Source record: 51502

In <27td5bINN9ku@network.ucsd.edu> brian@nothing.ucsd.edu (Brian Kantor) writes:

>Just a minor correction to the FAQ answers: the PACKET-RADIO@UCSD.EDU
>discussion list still exists and thrives; it's just not connected to the
>old usenet REC.RADIO.AMATEUR.PACKET newsgroup any more.
> - Brian

Yeah, and if one wants to continue to be an involved net-participant (as
opposed to a bar-the-door, future-shocked Luddite), one can subscribe
to HAM-DIGITAL@UCSD.EDU, which *IS* connected to the principal net forum
for discussion concerning packet radio and other digital modes,
rec.radio.amateur.digital.misc.

73, Paul W. Schleck, KD3FU

pschleck@unomaha.edu

366. Re: TRS-80

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-24 04:01:50 UTC
From: collinst@esvx19.es.dupont.com
Message-ID: <1993Sep24.040150.15915@es.dupont.com>
Source record: 51504

In article <1993Sep23.125049.1@utxvms.cc.utexas.edu>, johnz@utxvms.cc.utexas.edu writes:
>I have an old TRS-80 that I would like to use for digital. I know that
>software was once available for this. Does anyone know where I could find
>same? Also TNC plans?
>Thanks close
>

IF your TRS-80 has a RS-232 card in it, all you need is some type
of comm program. Should be a few in SIMTEL or the larger ftp sites.

73, Tom WI3P collinst@esvax.dnet.dupont.com or collinst@holonet.net
***** The comments, opinions, belief, sentiment, views & scribblings ****
***** above this signature are mine, and mine alone. They do not ****
***** reflect the E.I. DuPont de Nemours Co., Inc., its subsidiaries ****
***** and/or its partners nor its employees or shareholders. ****

367. TPK baycom driver needed help!

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-24 12:13:32 UTC
From: swain_i@kosmos.wcc.govt.nz
Message-ID: <1993Sep24.121332.1@kosmos.wcc.govt.nz>
Source record: 51501

Help I need the baycom modem driver for TPK and I don'y have FTP access gezz
I hate that!.. Never mind could someone please encode to me as mail??..

73 de ZL2IAS
Ian

368. Re: Modem Facilty in NOS???

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-24 14:32:54 UTC
From: jack@jspitznagel.utmem.edu
Message-ID: <CDv4Ew.ALB@dptspd.sat.datapoint.com>
Source record: 51505

In article <1993Sep23.123642.13611@e2big.mko.dec.com>
robin@ayjen1.enet.dec.com writes:

> I was wondering if there was a dialup modem facility in nos capable
> of the following.
>
>A person rings my home number, my PC is running NOS, It
>autoanswers and presents the dialer with either a ftp or telnet login
prompt.
>From here he can therfore up/download files from my PC system at will.

There is a facility there in some of the source code.... I never have been
able to get it compiled in without an error. It presents the dialup port
with the JNOS/PA0GRI type BBS prompt however, NOT TELNET or FTP!

You can configure a slip port and use either the "comm" or "dialer"
commands to set a modem to autoanswer.... If you have set up NOS properly
you can allow controlled access for ftp, telnet, and gateway to ampr.org
or internet..... CAVEAT: the individual dialing in must have an assigned
IP address or you must setup bootp (and he/she/it) must use bootp to get
a dynamically assigned IP address.

Good Luck

Jack -- KD4IZ -- Team OS/2

369. X1J

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-24 17:05:50 UTC
From: mitchell@sosc1.sosc.osshe.EDU
Message-ID: <9309241658.AA12585@ucsd.edu>
Source record: 51521

From: UCX_SMTP 24-SEP-1993 10:04:58.42
To: mitchell
CC:
Subj: Returned mail :%UCX-E-SMTP_NOSUCHNODE, Remote host unknown, uscd.edu

---- Transcript of session follows ----
%UCX-E-SMTP_NOSUCHNODE, Remote host unknown, uscd.edu
-SYSTEM-F-NOSUCHNODE, remote node is unknown

---- Unsent message follows ----
Date: Fri, 24 Sep 1993 09:38:23 -0700
From: mitchell@sosc1.sosc.osshe.edu
To: ham-digital@uscd.edu
Subject: Re:X1J
X-VMS-To: SMTP%"ham-digital@uscd.edu"

Thanks Gary for your suggestion (pulling the battery jumper and waiting
for 2-3 minutes). I thought I did that, but maybe I just didn't wait long
enough. I'll try to reset my tnc when I get home this evening. It's been
running great for 3 days now and I'm really happy with the stats. We put
an X1J node on our local BBS port that's connected to our 220 backbone.
What an improvement!!! We're running msys 1.15 and adding a node on
the backbone cluster really works well...

Now we have the stats to watch the 220 cluster and we can tell how things
are working. Our CPU times are in the 270 range which is ok, but I guess
that might be getting a little low... what kind of numbers is everybody
else getty for a TNC2 running at 4.9MHZ on a 1200 baud network?
Stu

370. Re: Any experience from delta modulation??

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-24 17:22:30 UTC
From: im@hydra.carleton.CA
Message-ID: <CDvC9I.8w8@cunews.carleton.ca>
Source record: 51506

Though I haven't used these chips by themselves, I have tested several commercial implementations of low bit rate voice with CVSD (continuously Variable Slope Delta), which I think is the chip set you are talking about.

The trick the commercial guys use is to filter the input (remember what Nyquist said). I think to do 9.6 kbps output the audio input was about 800 Hz to 1800 Hz. Sound on the systems I listened to and tested was a whole lot better than "typical" fm repeater audio (least what we have around here).

Although, as you can imagine, the quality is speaker dependant, and with the choice of audio bandpass, either male or female voices would sound awful ... at 800 to 1800, female voices sounded somewhate artificial.

im

--
Ian A. McEachern, VE3PFH | This space for rent.
Packet Working Group, Ottawa A.R.C. |
im@hydra.carleton.ca |
ian@ve3pfh.ampr.org |

371. Re: X1J

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-24 17:50:25 UTC
From: dave@llondel.demon.co.uk
Message-ID: <748918225snx@llondel.demon.co.uk>
Source record: 51508

In article <CDtxJz.LxE@srgenprp.sr.hp.com> glenne@sad.hp.com (Glenn Elmore) writes:
>I'd be very appreciative if someone would do a digital loopback
>test while increasing the speed to see how fast X1J will go.
>I'm currently using standard AX.25 TNC code in 10MHz Tiny2s to
>control several high speed radios. Currently I'm cpu/code bound
>to a maximum of only 38.4 kbps. I'd very much like to know if X1J
>can do this fast or better (or half this with standard 5M clock).
>I'd much prefer the functionality of X1J if it is at least as good.
>
It depends to some extent on whether you are running a continuous full-duplex
link or a stop-start simplex link (or somewhere in between).

If you run full-duplex, a 10MHz TNC will manage 9600baud on the RF port and
19200baud on the RS232 port. You can determine how well you are doing with the
stats command - check the over/underruns and the CPU loop timer to see how
hard the thing is working. You might also find that a node handling many
separate L2 connects will work harder than one used for linking where it
may only have two or three L2 links.

I haven't tried it faster than 9600baud, but being full-duplex on both ports
makes it work fairly hard.

Dave
--

****
* G4WRW @ GB7WRW.#41.GBR.EU AX25 * Start at the beginning. Go on *
* dave@llondel.demon.co.uk Internet * until the end. Then stop. *
* g4wrw@g4wrw.ampr.org Amprnet * (the king to the white rabbit) *
****

372. Re: 1Mb+ digital links

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-24 18:02:00 UTC
From: drenze@icaen.uiowa.edu
Message-ID: <1993Sep24.180200.16216@news.uiowa.edu>
Source record: 51507

I can't remember who posted this nor can I find the original article, but this is for the person who was interested in establishing a 1Mb+ digital backbone link...if nobody's already mentioned this, check in the 1993 ARRL Handbook on page 32-49. Section title is "A 2-Mbit/s Microwave Data Link." Even if you're not interested in doing this on the amateur bands, this should still be of some help.

Peace es 73 de Doug N0Y??
License Watch: Day 40 (05W 05D 00H 02M) and counting...

--
__ /| | Douglas J Renze | Charter Member, Popular Front
\'o.O' | +1 319 337 4664 | for Revolutionary Darwinism:
=(___)= | drenze@isca.uiowa.edu |
U | Douglas-Renze@uiowa.edu | Evolution Now!

373. Re: Link to Internet

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-24 18:15:34 UTC
From: pat@Tandem.com
Message-ID: <CDvEpz.FzI@cpd.tandem.com>
Source record: 51509

> I have a friend that operates a VHF packet radio. He is a teacher and would
> like to link up to the Internet with his students using packet radio. He has
> no modem or phone line. Is there any way he can access Internet with only the
> packet radio?

Here is information on my gateway.

-pat :-) N6QMY

==========

N6QMY/BBS Internet Gateway Operating Instructions
April 11, 1993

LOCAL USERS:

Local users are those that log into the bbs via the bbs's telephone modem
port (510-795-1223) or via one of the 4 tnc ports (145.09, 145.79, 223.62,
or 441.50). Each local user has a bbs account that is used to customize
how the bbs interacts with the user.

Local users can set their account up so that all incoming mail addressed
to their call will be forwarded via a gateway to internet and on to
other networks (mcimail, compuserve, etc). All the user needs to do is
enter his email address and turn the feature on.

EMAIL bob@hal.com
EMAIL ON

When the EMAIL feature is turned on the packet message will be deleted
at the time of forwarding through the gateway. So care should be taken
that the paths are correct prior to turning the feature on, for instance
enable it, send a test message, and disable it. After a successful
transfer re-enable the feature. To disable the auto forwarding feature
simply type:

EMAIL OFF

Messages can be sent by packet users to the internet users via the gateway.
This applies to users at N6QMY as well as users at other bbs's. Begin by
sending a message to IPGATE@N6QMY with the first line of the message being
the letters "To:" followed by the internet address of the recipient.

KB6UCZ de N6QMY >
sp ipgate@n6qmy
Enter your subject:
Meeting?
Enter your message body:

To: bob@hal.com
Are you planning to attend the club meeting on Thursday? Give me
a call. 73, Theresa
^Z

NOTE: That the recipient cannot respond to the message unless they
are a ham and registered with the gateway. He/she becomes registered by
sending a message from his internet host to gateway-request@lbc.com.

REMOTE USERS:

Remote users are those that do not log into N6QMY directly but merely
appear from the packet world to use it as home. If a packet user checks
the "White Pages" for a remote user the entry comes back as @N6QMY.
The packet user then address his message to YOURCALL@N6QMY and the
bbs will do the translation and forwarding to internet.

It is not necessary for a person to know your actual internet address
nor use the SP IPGATE method described above. From the packet network
it appears that you are just another user at N6QMY.

WHITE PAGES:

The "White Pages" is a distributed database of all the bbs users. Most
bbs users in the US are represented in the database as well as many from
other countries. When a user chooses a home bbs, that bbs generates
an update that is sent to the regional servers and then distributed to
all the other bbs's. An entry consists of; call, home bbs, first name,
zip, city and state. When a user wishes to send another packet user
a message he/she consults the white pages (WP) for the home bbs.

REGISTERING:

Before a user, both local and remote, can send a message from internet
into the bbs system he/she must register with the gateway. This is done
by sending a message from the host that he/she intends to use to
gateway-request@lbc.com with the following information:

CALL:
FIRST NAME:
LAST NAME:
CITY & ST:
COUNTRY:
ZIP:

HOME BBS:

When a request is received the "From" field is copied directly into
a file with the requesters call. Whenever the gateway receives a message
bound for packet it scans this file comparing on the "From" field. When a
match is found the gateway uses the associated call from then on. If
there is no match the mailer bounces the message with a one-liner
indicating the the user must register.

If you currently use another bbs as home this needs to be stated
in the request. Otherwise you will be assigned N6QMY as your home.
If you choose not to use N6QMY as your home you must make sure
people know to send your message to YOURCALL@N6QMY to pass through
the gate. Your WP entry will be wrong.

EXECUTING BBS COMMANDS REMOTELY:

Many of the commands available to local users is also available to
remote users by sending a message to the bbs. Here is a subset of
the commands currently available.

LIST listing messages
LOOKUP look up calls in the on-line callbook
WHO call dump a users account information
READ read messages and files
USERS n display the last n users to connect to the bbs
INFO display manual pages of various topics
CD change directories in the file system
LS/DIR display the contents of a directory
WP call look a user up in the "White Pages"
HELP get help on how to use a command

Not all commands available to local users can be accessed via the
gate. All interactive commands are disabled as well as commands
that modify the users account.

The command parser for the bbs is very powerful and the user can
form very complex requests. For instance the following command
is valid on the bbs:

LIST LAST 20 BULLETINS FROM N6QMY
LIST ALL BULLETINS ABOUT KENWOOD

The ABOUT keyword is used to search the subjects of messages for a
given pattern, in this case KENWOOD. It can appear anywhere in the
subject line.

This is an example of how complex all the commands can become. They
can also be abbreviated down to the level understood my most other
bbs programs. Any of the following will give the same results.

L< N6ZFJ
LIST FROM N6ZFJ
LIS < N6ZFJ
L FR N6ZFJ

In most cases a minimum number of unique characters is needed to
distinguish a command.

You can get a list of commands and a translation chart from the
W0RLI BBS command set to the N0ARY BBS command set by typing
the following commands:

INFO COMMANDS
INFO W0RLI

Other commands that you may wish to execute are:

INFO MANUAL
HELP HELP
HELP LIST

Now that you know what some of the commands are this is how you go
about executing them. You send a message to cmd@bbs.lbc.com
with your commands entered one per line or separated by semicolons.
For example if you want to know if three of your buddies are in
the white pages and if the bbs has any messages about the ICOM W2A.

Send to:
cmd@bbs.lbc.com

Subject: you can put anything here
wp n0ary n6zfj n6une
list all about w2a
.

The bbs will execute the commands and respond to you via return mail.

SENDING MAIL TO PACKET:

Once registered the user is free to begin using the gateway to send
messages from his host through the gateway into the packet world.
How much you have to specify of a users address depends on how much
the bbs already knows about the user.

If the bbs knows the home bbs of the user and his home bbs is know to
the N6QMY bbs, which many of them are, you simply need to supply
the call of the user.

n6oim@bbs.lbc.com

If the N6QMY bbs doesn't know of the user but does know where his
home bbs is, then you need to supply just the home bbs call in
addition to the users.

n6oim%n6iiu@bbs.lbc.com

Notice that the call and home bbs are separated by a percent sign '%'
rather then the '@' which is used in the packet domain. This is because
the '@' has a meaning in the internet address.

If the N6QMY bbs has no knowledge of either the user or his home bbs,
then you probably have the wrong home bbs or it is a new bbs. In which
case you will have to supply the full address so the bbs will know
how to route the message.

n6oim%n6iiu.#nocal.ca.usa.na@bbs.lbc.com

This level of addressing is hardly ever needed and normally means that
the home bbs is in error.

Bulletins can be sent in a similar fashion. The address is made up
of a keyword, which can be any six character word and a distribution.
Distributions are local to an area. For instance SBAY is valid in
northern CA, it probably has no meaning at all in Topeka, KS.

Valid distributions are:
ALLUS please avoid this one
ALLUSW all western US
ALLCA all California, any 2 letter state should work

So if you trying to find a cw filter for a Kenwood TS440.

Send to:
want%allca@bbs.lbc.com

Subject: Kenwood TS440, CW filter
If you have one of these you are willing to part with please
give me a call or leave message, thanks.
73, KB6UCZ@N6QMY.#NOCAL.CA.USA.NA
.

Be descriptive, brief, and always include your full return address in
the message. Also please try to limit your distributions to small
regions. Using the ALLUS distribution really slows down the flow of
messages.

INFO ON THE N6QMY BBS:

The bbs came into being in April of 1993 and was the second one anywhere
to run the N0ARY BBS code (the first being N0ARY himself). The bbs has
4 rf ports, 1 phone port, the internet port, and is working on a voice synthesizer port.
The latter would allow users to check for messages
via DTMF from their handhelds.

The bbs itself runs on a Sun workstation under Unix. The code was
written by Bob Arasmith (N0ARY) to focus on the user. Great care was
taken to make the bbs very forgiving to the novice user but very flexible
and powerful for the old-timer. The bbs can be configured to interact
with each user differently. Some examples are:

* List messages in either descending or ascending order.

* Specify a list of keywords that the user wishes not to see displayed
when a list is performed, similar to a kill file.

* .signature and .vacation files.

* Specify how many lines the users terminal is capable of displaying
before scrolling, the bbs will feed info this many lines and pause
allowing the user to catch up and continue or abort the operation.
Similar to more.

* Users can put commonly executed commands in keystroke macros that are accessible via a single keystroke.

A manual is currently available describing the commands and their permutations. This manual will be available later this year as a postscript file. Run the command INFO MANUAL to learn how to get one via the post office. It is not available in an ascii format.

If you have any questions about the internet gateway or the bbs in general please drop me a message.

73, -pat
n6qmy@n6qmy.#nocal.ca.usa.na
pat@lbc.com

374. re:9600 baud radio setup

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-24 18:59:05 UTC
From: bmm1@freenet.scri.fsu.edu
Message-ID: <199309241859.AA82822@freenet.scri.fsu.edu>
Source record: 51510

```
--
Bruce M. Marshall bmm1@freenet.fsu.edu voice 615 481 0990 fax 615 481 8039
```

375. re:9600 baud radio setup

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-24 19:14:57 UTC
From: bmm1@freenet.scri.fsu.edu
Message-ID: <199309241914.AA206899@freenet.scri.fsu.edu>
Source record: 51511

In-Reply-To: <9309241331.AA18552@eagle.aud.alcatel.com>; from "Tom Mcdermott" at Sep 24, 93 8:31 a
X-Mailer: ELM [version 2.3.1 PL1]

> Bruce: I cannot post to the newsgroup, so I will try to answer your question
> directly. You may post the response, if you like.
>
> 'tone pairs' are not used on FSK - you may be thinking about AFSK (such
> as is currently used on 1200 baud 2-meter FM packet). At 9600 baud, when
> operating FSK, you actually deviate the carrier frequency directly.
>
> This may be a little confusing, the difference is subtle.
>
> In FSK you provide two tones, one the mark, and the other the space. Let's
> say that the mark tone is 1000 hertz. Let's also assume that the carrier
> frequency is 450.000 Mhz. (don't tell the FCC!). In AFSK, when we apply
> the 1000
> sine-wave tone to the FM-modulator, we produce a carrier that moves above and
> below the channel frequency 1000 times a second. Notice we have not yet
> applied any modulation - we are just transmitting a MARK tone. How much
> does the carrier swing above and below the channel frequency? Well, that
> depends on the amount of deviation we apply to the carrier. A low amount
> of deviation, say 100 hz, wouild cause the carrier to swing from 449.99990 to
> 450.0001 Mhz 1000-times per second. A large amount of deviation, say
> 10 Khz, would cause it to swing from 449.900 to 450.010 Mhz, 1000-times
> per second.
>
> In FSK, however, we choose two channel frequencies to represent the
> MARK and the SPACE, say for example we decide to use 449.997 as the SPACE, and
> 450.003 as the MARK. We have no 'tones' to speak of. A mark (a logic one)
> is a DC level we feed to the modulator, while the SPACE (a logic zero) is
> a DIFFERENT DC level we feed to the modulator.
>
> In AFSK, we converted the DC_level of the MARK to the 1000 hertz tone,
> then applied that tone to the modulator. In FSK, we bypass the step of
> converting the MARK to a tone, and just apply the mark (the logic level)
> directly to the modulator.
>
> In reality, we will filter the transitions in the logic levels between
> MARK and SPACE a little bit, since feeding things with sharp-square voltage
> changes to the modulator would result in a very broad transmitted signal.
>
> In the US, on the 450 ham band, it is traditional to use about 3 khz deviation

> FSK for 9600 baud. That means that the SPACE is 3 khz below the channel,
> while the MARK is 3 khz above the channel (a net difference of 6 khz).
>
> Note that to achieve FSK, you must apply the modem's transmit DC type signal
> directly to the radio's crystal-varactor diode. YOU CANNOT APPLY THIS SIGNAL
> TO THE MICROPHONE JACK OF A STANDARD FM-VOICE RADIO. IT WILL NOT WORK !
>
> Speaking from substantial experience in the 9600 baud ham business, I have
> made a number of different radios work at 9600 baud. Generally, I have the
> best luck with crystal controlled commercial surplus, but others can be
> made to work - it can get complicated, though. 9600 baud FSK is not as
> forgiving as AFSK, and you should consider finding someone with an
> oscilloscope, and preferably a service monitor in order to be sucessful. I
> have to comletely characterize a radio before I use it at 9600 baud. I measure
> how sensitive the varicap is to the applied DC voltage - so I know exactly
> what signal level to apply to get exaxctly 3 khz deviation. I also have
> to check the frequency response of the TX varicap circuit to make sure
> that it does not introduce distortion. Also, I have to carefully measure the
> RX discriminator or quadrature detector response to make sure that it is
> linear, and well centered.
>
> Finally, a subtle point, some radio use low-
> side injection on the RX, others use high-side injection. Also, in the
> FM world, manufacturers don't care about the polarity of the discriminator -
> that is whether the disc produces a high-output-voltage for a higher input
> frequency, or whether it produces a lower-output-voltage for a higher input
> frequency. The upshot of this is that the received signal may be 'upside
> down'. You will have to invert the logic level if it is upside-down !!
> (Do this at the receiver, or else you will be incompatible with everyone else).
>
> Sorry for the long diatribe - hope this answers your question.
>
> Tom, N5EG
> Texas Packet Radio Society
>
>

Tom:
Thanks for your response. Lots of people answered me but none in such detail.
Diatribe appreciated. I am sort of in the collecting information stage at this
point of the project. My goal is to get onto oscars 22 & 23. I think I have
all the basic equipment and radio schematics and a scope that goes to 5mhz.
All I need now is a plan of attack. I have been on oscars 16 & 19 at 1200 bpsk
so this is an incremental step forward (although I suffered a setback when the
new version of the satellite software was compiled using the 286 instruction
set. All of a sudden I'm short a computer). My radios are a modified pro 2006
for the receiver and a old Icom IC-211 all mode 2meter transeiver. The
Pro 2006 has a nominal sensitivity of +- 9khz with a limit of +-12khz so I
have hope this may be wide enough. I'll worry about the Transmitter when I get
a downlink working. My modem is a DSP-12. If you or anyone has any hints or

any published information I would appreciate it.

Bruce.

Ps: I don't have access to a news reader either. I use Gopher to read the
news ant post via a gateway. Try sending mail to
rec-radio-amateur-space@cs.utexas.edu
or whatever news group you want to post to.

--
Bruce M. Marshall bmm1@freenet.fsu.edu voice 615 481 0990 fax 615 481 8039

376. TH-21AT???, Packet???

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-24 19:40:51 UTC
From: landisj@drager.com
Message-ID: <0097306324296FE0.24001D36@drager.com>
Source record: 51512

Hi,
I picked up a Kenwood TH21-AT at a hamfest a few weeks ago, along with extra batteries, a desk charger, and a mobile ant. I think it's a pretty nice little 2M HT for what I paid ($150). I wanted something light and compact that could be taken hiking and biking, without worrying too much about banging it up. It's also my first exposure to VHF.

I was thinking of trying out VHF packet with this. It's got separate MIC and SP jacks, but no ptt. Also, the manual warns about there being DC on the mic line, and having to use the Kenwood mic. How do you do PTT when the remote speaker/mic is installed? A friend suggested that some HT's use a connection on the speaker jack to do PTT. Anybody know how this would work for this unit? I don't have a TNC yet, but I want to do something soon. Eventually, I'll probably pick up a 2M mobile or base, but my pockets aren't that deep right now.

Also, does anyone have any comments about this radio? Mods? It could use a little frequency tweaking. Can I get inside to do this, assuming I have access to a counter? Or is it impossible to take this little thing apart and get it back together?

Thanks,
Joe (landisj@drager.com)
N3PQY/AE (AA3??)

377. Subscribe

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-24 22:20:11 UTC
From: psmith@mozart.convex.COM
Message-ID: <9309242220.AA15032@mozart.convex.com>
Source record: 51522

```
subscribe
```

378. Re: Responsibility for BBS messages

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-25 07:35:47 UTC
From: enge@enge.almaden.ibm.com
Message-ID: <280scj$jb5@juniper.almaden.ibm.com>
Source record: 51514

The FCC has proposed that the originator and the first BBS be
responsible. Previously they have held that all stations are
responsible.

It was also evident that they didn't require you to review all messages
but simply have a policy where you reviewed some.

Roy Engehausen, AA4RE
enge@almaden.ibm.com

379. Re: 9600 baud radio setup

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-25 14:00:26 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1993Sep25.140026.29435@ke4zv.atl.ga.us>
Source record: 51517

In article <199309241914.AA206899@freenet.scri.fsu.edu> bmm1@freenet.scri.fsu.edu (Bruce M. Marshall) writes:
> In-Reply-To: <9309241331.AA18552@eagle.aud.alcatel.com>; from "Tom Mcdermott" at Sep 24, 93 8:31 a
> >
> > Finally, a subtle point, some radio use low-
> > side injection on the RX, others use high-side injection. Also, in the
> > FM world, manufacturers don't care about the polarity of the discriminator -
> > that is whether the disc produces a high-output-voltage for a higher input
> > frequency, or whether it produces a lower-output-voltage for a higher input
> > frequency. The upshot of this is that the received signal may be 'upside
> > down'. You will have to invert the logic level if it is upside-down !!
> > (Do this at the receiver, or else you will be incompatible with everyone else).

A comment on what Tom said. For RTTY, his comments are correct,
but for packet, we don't care which is mark and which is space.
Only the transitions matter. Packet uses synchronous NRZI with
bit stuffing. We're only interested in the zero crossings in
order to recover clock and data. A transition during a bit time
means '1' and no transition means '0'. So upside down signals
are as good as right side up signals for recovering the zero
crossings. That's why we have to do bit stuffing BTW, otherwise
a long string of '0's would mean no transitions and the clock
would lose synchronization.

Gary
--
Gary Coffman KE4ZV |"If 10% is good enough | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | for Jesus, it's good | uunet!rsiatl!ke4zv!gary
534 Shannon Way | enough for Uncle Sam."| emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -Ray Stevens |

380. Re: Responsibility for BBS messages

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-25 15:16:00 UTC
From: mcduffie@unlinfo2.unl.edu
Message-ID: <281nbg$h7j@crcnis1.unl.edu>
Source record: 51515

dave@llondel.demon.co.uk (David Hough) writes:

>Not sure if this should be here or in .policy, but as this is where I would
>expect to find some BBS sysops, here goes anyway.....

>Can someone from the US let me know who is responsible for message contents on
>BBS over there? I always understood that the FCC held the originator and all
>the BBS sysops responsible, although someone on this side of the pond says that
>the responsibility is now only with the originator. Is he right, am I right
>or is the answer somewhere in between?

>If anyone is interested, the UK rules remove responsibility from the BBS sysop
>unless he has reviewed the message, so if I didn't look at it, it isn't my
>fault :-)

>Dave
>--

Unfortunately, Dave, the answer is "in between". In their infinite stupidity, the FCC/ARRL has decided that, not only the originating station, but, the first BBS the originator plants it on (originating BBS) is responsible for a message. So, we are still stuck with having to HOLD all local originations so they may be checked for legality before releasing them into the stream. Why the originating station can't be held solely responsible is beyond me. I guess it's just like government, if it's too simple, it can't work.

Thy UK rule looks good to me.

73 and take care,
Gary - AG0N
mcduffie@unl.edu
ag0n@unl.edu
AG0N@AG0N.#WNE.NE.USA.NA

381. Re: X1J

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-25 18:48:26 UTC
From: mitchell@sosc1.sosc.osshe.EDU
Message-ID: <9309251846.AA23428@ucsd.edu>
Source record: 51516

Well I reset the TNC's as promised and they seem to reset fine. I guess there must have been some residual code left in RAM even after I pulled the jumper, pulled the RAM chip, and let them sit for a minute or two. Thanks for all the help Gary (and Dave).

stu

382. Re: Responsibility for BBS messages

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-26 08:44:11 UTC
From: ae674@yfn.ysu.edu
Message-ID: <283kos$53d@news.ysu.edu>
Source record: 51518

I guess we all have to have a 'BBS' then. I assume the ARRL/FCC were thinking about straight AX-25???

383. Re: 9600 baud radio setup

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-26 09:54:40 UTC
From: dave@llondel.demon.co.uk
Message-ID: <749062480snx@llondel.demon.co.uk>
Source record: 51523

In article <1993Sep25.140026.29435@ke4zv.atl.ga.us> gary@ke4zv.UUCP (Gary Coffman) writes:
>bit stuffing. We're only interested in the zero crossings in
>order to recover clock and data. A transition during a bit time
>means '1' and no transition means '0'. So upside down signals
>are as good as right side up signals for recovering the zero
>crossings. That's why we have to do bit stuffing BTW, otherwise
>a long string of '0's would mean no transitions and the clock
>would lose synchronization.
>
Haven't you got it upside down? You can't have more than five '1's in
normal data without a '0' being added. This would suggest that a '0' is
the transition and a '1' is a no-change.

Dave
--

****
* G4WRW @ GB7WRW.#41.GBR.EU AX25 * Start at the beginning. Go on *
* dave@llondel.demon.co.uk Internet * until the end. Then stop. *
* g4wrw@g4wrw.ampr.org Amprnet * (the king to the white rabbit) *
****

384. Re: Icom IC-25a and Tandy HTX-202 to 9600 baud ?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-26 10:34:05 UTC
From: ae674@yfn.ysu.edu
Message-ID: <283r6t$7b6@news.ysu.edu>
Source record: 51519

>Has anyone modified an Icom IC-25a and/or a Tandy HTX-202 to run 9600 baud
>packet?
>What were the changes and how well did it work.

I have an HTX-202 and a friend of mine has a Icom IC-25. I'd love
to be able to use my HTX-202 for 9600 baud but I think the receive is
way to narrow. If anybody has the mods for either one of these please
post them or e-mail me.

Thanks,

Reid Savage N9SYW ae674@yfn.ysu.edu (my virtual Internet account)
-it doesn't matter where on the Internet it is just as long
can get there some how

385. Re: Any experience from delta modulation??

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-26 11:46:22 UTC
From: ae674@yfn.ysu.edu
Message-ID: <283vee$8k3@news.ysu.edu>
Source record: 51520

I think any real time digital voice experiments over radio would be cool.
(at least so you can say you have experimented with digital audio over radio)
But if digital voice is going to become a regular form of communication
for hams (and thats a big IF) it should offer some real advantages over good
old analog FM. One obvious advantage is that you couldn't be received on any
normal FM scanners. Another one that comes to mind is since you wouldn't be
transmitting a phone emission you wouldn't be banned from transmitting
interesting patterns of bits/waveforms&##

But in order for any digital voice to work at all we will need decent high speed
RF modulation schemes (if using only moderate compression at a good quality).
The important issue is how reliable can you make low bit rate digital audio?
I'm not an expert on digital coding and FEC but I do know a little bit. It
would seem to me that you would run some kind of FEC to eliminate most single
bit errors. After that the delta modulated data would be encoded in a small
block with a few absolute samples and a CRC. If there were byte level errors
that couldn't be corrected by the FEC you would try and linear interpolate
between the nearest samples by computing the other relative samples backwards
from one last absolute sample. I don't think you could have too many byte
level errors before the guess's would get kind of bad. But then you could
just resend the block and eliminate almost all the errors!! (pactor style)
I think this would be pretty incredible if we could do this. I think there
would be only minor delays or hickups when the signals get hard to decode.
Usually when you can't understand an FM comunication you have to ask for
it to be repeated which is at least a 10 sec delay!!
I invite all constructive criticisms (just to get this news group going)

73,
Reid Savage N9SYW ae674@yfn.ysu.edu (my virtual Internet account)
-it doesn't matter where on the Internet it is just as long
can get there some how

386. Need help w/ nos and wd8003

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-26 19:35:00 UTC
From: "Glenn.Butzlaff" <Glenn.Butzlaff@mixcom.mixcom.com>
Message-ID: <1993Sep26.193500.5054@mixcom.mixcom.com>
Source record: 51524

Hello to the Network

I recently bought 2 wd8003s LAN cards at a swapfest. I havent any
experience with this hardware, and I want to run these cards in
2 dos boxes running wg7j nos. First question...how to set the base
address for the card? The irq settings look straight-forward enough.
Second, where can I find the driver for this card. I am also
assuming that I can run the UTP between the machines once set up and
have them talking. If Im wrong please let me know. Any help/info
will be greatly appreciated. Thanks in advance.

Glenn Butzlaff / we9k
we9k@we9k.ampr.org 44.92.1.52

--

387. Re: Any experience from delta modulation??

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-26 21:13:20 UTC
From: henrys@feenix.metronet.com
Message-ID: <CDzCA9.EGx@feenix.metronet.com>
Source record: 51525

Erik,
Thanks for your very nice, informative response via email. I am glad
that you understood my question "Help me on this Erik..." as an actual
question (as it was truly meant to be.)

Mr. Coffman, lighten up!

Let the discussions continue, I am enjoying them!

Henry "Smitty" Smith - NA5K

--
Henry B. Smith - NA5K | henrys@feenix.metronet.com
1380 Camino Real | Home phone (214) 562-3049
McKinney, TX 75069 | Office phone (214) 333-6077

388. Re: 9600 baud radio setup

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-26 22:55:54 UTC
From: gila005@uabdpo.dpo.uab.edu
Message-ID: <gila005-260993180054@right.dom.uab.edu>
Source record: 51526

In article <749062480snx@llondel.demon.co.uk>, dave@llondel.demon.co.uk
(David Hough) wrote:
>
> In article <1993Sep25.140026.29435@ke4zv.atl.ga.us> gary@ke4zv.UUCP (Gary Coffman)
writes:
> >bit stuffing. We're only interested in the zero crossings in
> >order to recover clock and data. A transition during a bit time
> >means '1' and no transition means '0'. So upside down signals
> >are as good as right side up signals for recovering the zero
> >crossings. That's why we have to do bit stuffing BTW, otherwise
> >a long string of '0's would mean no transitions and the clock
> >would lose synchronization.
> >
> Haven't you got it upside down? You can't have more than five '1's in
> normal data without a '0' being added. This would suggest that a '0' is
> the transition and a '1' is a no-change.
There are two issues. For a synchronous channel to run properly there
is a set flag character. There is bit stuffing in bit streams to
convert a character that looks like a flag to something special so
the receive end does not get confused. There is also the sychronization
matter. Not that I really know, but I am interested learning about
9600 baud stuff, and I wanted to advertise my ignorance and get the
protocol clear to me. By the way, is the g3ruh setup fsk or afsk, and
why is it that QAM is not supposed to work over a radio (why couldn't
a DSP fix it up?)

Steve Holland
Just taking advantage of the collective wisdom.

389. Streams driver for a KISS TNC on a SVr4 Serial Port?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-26 23:06:24 UTC
From: chris@kd3bj.uucp
Message-ID: <CDzHIo.9Mp@kd3bj.uucp>
Source record: 51529
Cross-posted to: rec.radio.amateur.digital.misc,comp.unix.sys5.r4

Does such a beast exist? I've seen NOS ports to System V and I've seen
a TNC device driver for Sun-OS. Has anyone written a Streams TNC Driver?

If not, I'll write one, but I'll probably need some help.
--
73 de KD3BJ (Chris Nadovich, chris@kd3bj.ampr.org)

390. News via FM Subcarriers/receiving data broadcasts

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-27 03:52:16 UTC
From: jubois@netcom.com
Message-ID: <juboisCDzur4.1J8@netcom.com>
Source record: 51527

Hi all--

Anyone out there have any experience getting news & stock info via FM subcarrier?

Most of the wire services are now sending stories out this way, as are lots of smaller, specialized information services.

Some of this info appears to be encrypted; anyone know anything about that? What are the best receivers & software packages?

Thanks.
Jeff Ubois
jubois@netcom.com

391. SLIP/MacNet/NOS/ka9q

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-27 07:14:44 UTC
From: n9244588@beaker.cc.wwu.edu
Message-ID: <n9244588.749114084@beaker>
Source record: 51528

I have MacNet for the mac, same basic program as ka9q's and seem to be having difficulty using it in slip mode. The program doesn't seem to be communicating w/ the modem (a zoom 2400 fax modem). I have scrounged through the manuals and the help files and nothing seems to work.
Machine: LCII

73

Tollef

Tollef Winslow, KB7DNS | The thoughts expressed here are the sole
voice - (206) 650-2521 | product of my mind, the rest of my body takes
data/fax - (206) 650-2038 | no responsibility for the above stated.

I apologize for the confounded number but the Western Washington Mental Institution to which I am committed doesn't believe in humans, only numbers.
---

392. DSP600 phonepatch from JCOM

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-27 13:15:32 UTC
From: taalebi@gel.ulaval.CA
Message-ID: <9309271315.AA03361@stlaurent.gel.ulaval.ca>
Source record: 51530

I wonder if anyone has had any experience with
SDP600 phonepatch from JCOM?
Your commends on this equipment will be very much appreciated.

73`s de N1HPP,

Ali Taalebi
taalebi@gel.ulaval.ca

393. Re: Responsibility for BBS messages

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-27 14:18:08 UTC
From: lkollar@nyx.cs.du.edu
Message-ID: <1993Sep27.141808.13231@mnemosyne.cs.du.edu>
Source record: 51531

mcduffie@unlinfo2.unl.edu (Gary McDuffie Sr) writes:

>[...] the FCC/ARRL has decided that, not only the originating
>station, but, the first BBS the originator plants it on (originating
>BBS) is responsible for a message. So, we are still stuck with having
>to HOLD all local originations so they may be checked for legality
>before releasing them into the stream. Why the originating station
>can't be held solely responsible is beyond me.

Probably because it's easy to forge a callsign on packet. If I were to
post something illegal, not that I ever would, :-) I sure wouldn't post
under my own call.

I can understand it, that doesn't mean I like it.

--
Larry Kollar, KC4WZK | I like CW, but that doesn't mean I think every ham
lkollar@nyx.cs.du.edu | should have to learn it.
"You mean you came back from the dead, to tell me I'm *odd*?"

394. Re: Responsibility for BBS messages

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-27 17:59:14 UTC
From: hanko@wv.mentorg.com
Message-ID: <1993Sep27.175914.10643@news.mentorg.com>
Source record: 51532

Odd as it might seem, I can also forge the message headers,
which are the main way to tell which system might have
transmitted the message.

I can't forge the log files at the systems mentioned in the
forged headers though ... we sysops DO all keep our log files,
don't we ?

In article <1993Sep27.141808.13231@mnemosyne.cs.du.edu>, lkollar@nyx.cs.du.edu (Larry Kollar) writes:
|>
|> mcduffie@unlinfo2.unl.edu (Gary McDuffie Sr) writes:
|>
|> >[...] the FCC/ARRL has decided that, not only the originating
|> >station, but, the first BBS the originator plants it on (originating
|> >BBS) is responsible for a message. So, we are still stuck with having
|> >to HOLD all local originations so they may be checked for legality
|> >before releasing them into the stream. Why the originating station
|> >can't be held solely responsible is beyond me.
|>
|> Probably because it's easy to forge a callsign on packet. If I were to
|> post something illegal, not that I ever would, :-) I sure wouldn't post
|> under my own call.
|>
|> I can understand it, that doesn't mean I like it.
|>
|> --
|> Larry Kollar, KC4WZK | I like CW, but that doesn't mean I think every ham
|> lkollar@nyx.cs.du.edu | should have to learn it.
|> "You mean you came back from the dead, to tell me I'm *odd*?"

--

Hank Oredson @ Mentor Graphics
Internet : hank_oredson@mentorg.com
Amateur Radio: W0RLI@W0RLI.OR.USA.NA

395. Re: Need help w/ nos and wd8003

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-27 20:11:14 UTC
From: jack@jspitznagel.utmem.edu
Message-ID: <CE142s.Cvs@dptspd.sat.datapoint.com>
Source record: 51533

In article <1993Sep26.193500.5054@mixcom.mixcom.com> Glenn.Butzlaff
<Glenn.Butzlaff@mixcom.mixcom.com> writes:
>Hello to the Network
>
>I recently bought 2 wd8003s LAN cards at a swapfest. I havent any
>experience with this hardware, and I want to run these cards in
>2 dos boxes running wg7j nos. First question...how to set the base
>address for the card?

There is a WD produced setup program that allows you to configure the
cards. You'll have to look around for a copy of it...

UTP..... probably.

Jack Spitznagel
KD4IZ
Team OS/2

396. Re: Responsibility for BBS messages

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-27 20:35:43 UTC
From: brian@nothing.ucsd.edu
Message-ID: <287iqvINNc4b@network.ucsd.edu>
Source record: 51535

lkollar@nyx.cs.du.edu (Larry Kollar) writes:
>Probably because it's easy to forge a callsign on packet. If I were to
>post something illegal, not that I ever would, :-) I sure wouldn't post
>under my own call.

It's even easier to forge a callsign with your voice. You just say
"this is W1AW". Is the repeater owner to be held responsible for
recognizing the voice of every one of his users?

- Brian

397. Re: Responsibility for BBS messages

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-27 20:45:41 UTC
From: miltonm@austin.ibm.com
Message-ID: <CE15o6.142r@austin.ibm.com>
Source record: 51534

My understanding is that the ARRL wanted originator only, but the
FCC said "no way, not until **** freezes over" or something close,
so the ARRL took the next best thing. Evidently, the FCC thinks it
is too easy to forge a message in someone elses name/call.

milton

PS: This was heard at the ARRL session at the Texas VHF/FM society summer
meeting in Austin, TX.

--
Milton Miller KB5TKF miltonm@austin.ibm.com
These are my views, as I don't represent IBM.

398. Re: Responsibility for BBS messages

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-27 21:07:12 UTC
From: johnr@ms.uky.edu
Message-ID: <CE16o1.JKA@ms.uky.edu>
Source record: 51536

There are many people including myself that would open up
internet access to the local hams if this rule would
change. I have a 486 running Linux that would be
very easy to configure to pass messages from a TNC
to the internet. I don't have the time nor the desire
to read all the traffic so it doesn't happen.

Oh well,
John
--
-=+ John S. Roberts, Jr. 100 McVey Hall Work: 257-2275 +=-
-=+ University of Kentucky Home: 272-1417 - FAX: 272-7105 +=-

399. Re: Responsibility for BBS messages

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-27 22:16:55 UTC
From: pat@Tandem.com
Message-ID: <CE19w8.Ez6@cpd.tandem.com>
Source record: 51537

johnr@ms.uky.edu writes:

> I have a 486 running Linux that would be
> very easy to configure to pass messages from a TNC
> to the internet. I don't have the time nor the desire
> to read all the traffic so it doesn't happen.

There are other ways to handle this. I also don't have the time or desire to read all the traffic that passes through my gateway. The gateway I run requires every Internet user to register with the gateway so I can assign a callsign (not my own) to each message that passes through. This does cause some problems when you mail address changes, but nothing is perfect.

-pat N6QMY

400. Public access Packet question

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-27 22:33:26 UTC
From: rich@mulvey.com
Message-ID: <1993Sep27.223326.864@mulvey.com>
Source record: 51538

Hello:

I'm trying to figure out whether the following scenario is legal
under current FCC regs:

I have a Unix box connected to my TNC-2M rig. I would like to set
up a public-access land-line BBS for Amateurs that will allow them to dial up
my machine, and would then put them into a shell. This shell will
automatically set their call-signs, etc, and not allow them to
change it. However, they will still be able to connect to our local
backbone system, and from there, connect to wherever they want. I'll
keep a log of activity on the system, so if something goes wrong, I'll
know who to blame. :-) I'd like to give some local people who have
computers but no TNCs a taste of what packet can give them.

Since I will only allow verified Amateurs on the system, I look at
that as giving them permission to be control-ops for my equipment.

Does this sound feasible?

- Rich

--
Rich Mulvey Amateur Radio: N2VDS Rochester, NY
rich@mulvey.com "Ignorance should be painful."

401. Re: JNOS (linux) asy?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-27 23:55:35 UTC
From: Tomi.Manninen@hut.fi
Message-ID: <TOMI.MANNINEN.93Sep28015536@gamma.hut.fi>
Source record: 51539

In article <1993Sep25.215552.22584@worak.kaist.ac.kr> dklee@kaist.ac.kr (Dong Kyu Lee) writes:

>use jnos v1.09, OS: linux (SLS v1.03)
>att asy ??????
>my serial COM1 - tnc
>help me!!
>connect help me!!

From README file in j109lxA2.tar.Z:
---
(2) The attach command is different, since Unix doesn't allow you to talk directly to the serial hardware. The command is:

attach asy <device> - <slip|ax25|ppp> <if> <buflen> <mtu> <speed> [v]

<device> is the device name, without the /dev/ prefix (ex.: ttyS2 for a device on COM3, /dev/ttyS2). You can use the cua? ports if you wish. The argument after the device name is ignored. The "f" and FIFO depth flags will be ignored if specified, since this is handled entirely by the driver in the Linux kernel. Use the "setserial" command from the shell to enable/disable the 16550A FIFO for a serial port.

--
---Tomi Manninen / Tomi.Manninen@hut.fi / OH2BNS @ OH2RBI.FIN.EU---

402. Suggest Good Packet TNC (or multimode) for under $200

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-28 01:01:15 UTC
From: Jeffrey Luszcz <jrl2@cornell.edu>
Message-ID: <2882crlNN69f@newsstand.cit.cornell.edu>
Source record: 51440

I'd like to buy a Packet Radio TNC and don't know much about
the current equipment. I'm looking for something that I can use
on 2m with a Macintosh. I would also like to be able to use
battery power when I go mobile. I'm lookiung for something
under $200. I know about the MacPacket kit but I'm looking for
something that isn't dependant on the serial line for power,
I might want to use it on a IBM for a while and from what I've
read the MacPacket uses the RS-422 port to power itself and
it is different from an RS-232 port power structure.

Thanks,
-Jeff Luszcz
N2TIQ
jrl2@cornell.edu

403. Re: News via FM Subcarriers/receiving data broadcasts

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-28 02:04:09 UTC
From: bugs@NETSYS.COM
Message-ID: <bugs.749181849@netsys.com>
Source record: 51441

jubois@netcom.com (Jeff Ubois) writes:

>Hi all--

>Anyone out there have any experience getting news & stock info via FM
>subcarrier?
>Most of the wire services are now sending stories out this way, as are lots
>of smaller, specialized information services.
>Some of this info appears to be encrypted; anyone know anything about
>that? What are the best receivers & software packages?

There are a handfull of sca receivers - they all seem to work of if you
have access to a good signal. I don't, and so I had to fool around with
several receivers. External antenna ect. It not worth fooling with if
you don't have a good signal.

The encryption is very very simple (those hand held portables don't have
a lot of manly cycles available :-)).

Most legit sources will not let you get into their stuff and hack it.
Its all undocumented. There was a guy in colorado who was selling some
stuff for this a few years ago but I think he was sundeviled.

All that SCA stuff is on cable tv to in the video blanking intervals.
The signal quality is *MUCH* better. This is what all interested parties
should be fooling around with. The SCA stuff is not reliable enough.

Whats back with the wrong-ups?

404. Re: Any experience from delta modulation??

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-28 02:42:43 UTC
From: ee_hflo@uxmail.ust.hk
Message-ID: <1993Sep28.024243.12604@uxmail.ust.hk>
Source record: 51445

In article <g1uBac2w165w@vulcan.com> gary@vulcan.com (gary) writes:
>
>I have tried delta modulation using the Motorola chips. I didn't put it
>out on the air, but simply tied the data leads together and tested the
>back-to-back arrangment at various sample rates. My results were
>disappointing. To get any quality voice, the sample rate had to be above
>about 40 kilo-samples/sec. I dropped the project at that point.
>
>Good luck de ko4cy
>gary@vulcan.com

Not really, I have tried to using the Motorola chip on an answer
machine. I get quite acceptable voice quality using 32.768KHz.

The high pass filter design is important.In my circuit a high pass
filter was used to kill the 16Khz noise.

Lo Ho Fung Michael	== Internet e-mail address ==
Department of	University : ee_hflo@stu.ust.hk
Electrical & Electronic Engineering	Radio Call Sign : VR2YJR
The Hong Kong University	Stand by at
of Science & Technology	VS6KP repeater : 145.650 MHz (-)
Major : Computer Engineering	VS6HKA repeater : 145.750 MHz (-)
---

405. Re: HAPN packet, what is it?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-28 03:05:06 UTC
From: dave@esi.COM.AU
Message-ID: <4580@eram.esi.COM.AU>
Source record: 51442

In article <CDnouC.r3@world.std.com>,
eac@world.std.com (Eric A Cottrell) writes:

| The HAPN Modem is a 4800 baud modem put out by a group called HAPN. It's
| advantage over 9600 baud is the audio can be fed into the mic and taken
| from the speaker without modification (or little modification?).

Hmmm... According to the instructions that came with both my 4800 HAPN
kits, audio must be discriminator/modulator based. However, you don't
need a "true-FM" (tm) rig for it, unlike 9600. Perhaps you are
confusing this with 2400, where like 1200 you can use spkr/mic audio?

--
Dave Horsfall (VK2KFU) VK2KFU @ VK2RWI.NSW.AUS.OC PGP 2.3
dave@esi.COM.AU ...munnari!esi.COM.AU!dave available

406. Re: Responsibility for BBS messages

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-28 06:37:27 UTC
From: mcduffie@unlinfo2.unl.edu
Message-ID: <288m37$108@crcnis1.unl.edu>
Source record: 51444

lkollar@nyx.cs.du.edu (Larry Kollar) writes:

>mcduffie@unlinfo2.unl.edu (Gary McDuffie Sr) writes:

>>[...] the FCC/ARRL has decided that, not only the originating
>>station, but, the first BBS the originator plants it on (originating
>>BBS) is responsible for a message. So, we are still stuck with having
>>to HOLD all local originations so they may be checked for legality
>>before releasing them into the stream. Why the originating station
>>can't be held solely responsible is beyond me.

>Probably because it's easy to forge a callsign on packet. If I were to
>post something illegal, not that I ever would, :-) I sure wouldn't post
>under my own call.

So what? Why should "I" be held responsible if someone gets on the air
and bootlegs a call? I had nothing to do with it. Let's take the case
of a legit message that was put on by a bootlegger. What is the
difference? The bootlegger still needs to be caught and there isn't
much I can do to help catch him.

>I can understand it, that doesn't mean I like it.

>--
>Larry Kollar, KC4WZK

Gary - AG0N

407. Re: SLIP/MacNet/NOS/ka9q

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-28 10:20:28 UTC
From: "Terry M. Stader KA8SCP" <p00489@psilink.com>
Message-ID: <2958297551.0.p00489@psilink.com>
Source record: 51446

Tollef... Adam-PA2AGA has some pretty good release notes in his version
of NET/Mac... what version are you running? I'd be glad to help you
out.... but it would best if you have some of the reference notes.

>DATE: 27 Sep 93 07:14:44 GMT
>FROM: Tollef Winslow <n9244588@beaker.cc.wwu.edu>
>
>I have MacNet for the mac, same basic program as ka9q's and seem to be
>having difficulty using it in slip mode. The program doesn't seem to be
>communicating w/ the modem (a zoom 2400 fax modem). I have scrounged
>through the manuals and the help files and nothing seems to work.
>Machine: LCII
>
>73
>
>Tollef
>
>---
> Tollef Winslow, KB7DNS | The thoughts expressed here are the sole
> voice - (206) 650-2521 | product of my mind, the rest of my body takes
> data/fax - (206) 650-2038 | no responsibility for the above stated.
>---
> I apologize for the confounded number but the Western Washington Mental
> Institution to which I am committed doesn't believe in humans, only numbers.
>---

Terry M. Stader, KA8SCP, America Online (AOL) Ham Radio Club Host
Macintosh Amateur Radio Software List Maintainer
Internet: tstader@aol.com or p00489@psilink.com
Packet: KA8SCP@WA1PHY.#EMA.MA.USA.NOAM

408. subscribe

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-28 13:12:59 UTC
From: 71531.3662@CompuServe.COM
Message-ID: <930928131259_71531.3662_FHD41-1@CompuServe.COM>
Source record: 51449

```
subscrible
```

409. Re: Need help w/ nos and wd8003

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-28 13:15:12 UTC
From: kf5mg@vnet.ibm.com
Message-ID: <CE2FHD.DL7@hawnews.watson.ibm.com>
Source record: 51447

In <1993Sep26.193500.5054@mixcom.mixcom.com>, Glenn.Butzlaff
<Glenn.Butzlaff@mixcom.mixcom.com> writes:
>Hello to the Network
>
>I recently bought 2 wd8003s LAN cards at a swapfest. I havent any
>experience with this hardware, and I want to run these cards in
>2 dos boxes running wg7j nos. First question...how to set the base
>address for the card? The irq settings look straight-forward enough.
My WD8003 cards uses a program called EZSETUP to set both the IRQ and
the base address. Actually, I think that there is a Setting that says
use hardware select instead of software select. Since I have the ezsetup
file, I use software select. I'll have to check what the default I/O
address is. I think that it's either 0x280 or 0x300, but I remember
using 0xD000 someplace.

>Second, where can I find the driver for this card. I am also
There is a WD8003.COM, FTP Packet Driver in the regular Packet Drive
packages. Russ N. is working on the V11 driver package. Don't have a
list of FTP sites to get this. Sorry.

>assuming that I can run the UTP between the machines once set up and
>have them talking. If Im wrong please let me know. Any help/info
>will be greatly appreciated. Thanks in advance.
Sorry.... don't know what UTP is. It is possible to have Two NOS boxes
talk to eachother using these cards, if that's what you were asking.

Please send me a note off line in case I forget to look up the info.
Thanks.

73's de Jack - kf5mg
AX25net - kf5mg@kf5mg.#dfw.tx.usa.na - (817) 962-4409
Internet - kf5mg@kf5mg.ampr.org - 44.28.0.14
Worknet - kf5mg@vnet.ibm.com

410. Re: Public access Packet question

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-28 13:24:12 UTC
From: kf5mg@vnet.ibm.com
Message-ID: <CE2FwC.1LuD@hawnews.watson.ibm.com>
Source record: 51448

In <1993Sep27.223326.864@mulvey.com>, rich@mulvey.com writes:
> I'm trying to figure out whether the following scenario is legal
>under current FCC regs:
>
> I have a Unix box connected to my TNC-2M rig. I would like to set
>up a public-access land-line BBS for Amateurs that will allow them to dial up
>my machine, and would then put them into a shell. This shell will
>automatically set their call-signs, etc, and not allow them to
>change it. However, they will still be able to connect to our local
>backbone system, and from there, connect to wherever they want. I'll
>keep a log of activity on the system, so if something goes wrong, I'll
>know who to blame. :-) I'd like to give some local people who have
>computers but no TNCs a taste of what packet can give them.
>
> Since I will only allow verified Amateurs on the system, I look at
>that as giving them permission to be control-ops for my equipment.
>
> Does this sound feasible?

Sounds OK to me. Of course, I'm not the FCC. :) I know that others are
doing something similar with NOS. NOS has a Phone-Port Login: sequence
that lets a person call in and gain acess to the radio ports. If someone
starts transmitting Illegal messages, I don't know if you'll be able to
say that the person gaining access to your equipment was the control
operator or not. You may be fined for any infractions of the FCC rules.
Especially if a non-ham get's in somehow. I think that the Benefits
outway the risk in this case. Just make sure and don't use first names
as the password.

73's de Jack - kf5mg
AX25net - kf5mg@kf5mg.#dfw.tx.usa.na - (817) 962-4409
AMPRnet - kf5mg@kf5mg.ampr.org - 44.28.0.14
Internet - kf5mg@vnet.ibm.com

411. Re: Any experience from delta modulation??

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-28 13:25:47 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1993Sep28.132547.13088@ke4zv.atl.ga.us>
Source record: 51450

In article <283vee$8k3@news.ysu.edu> ae674@yfn.ysu.edu (Reid Savage) writes:
>
>I think any real time digital voice experiments over radio would be cool.
>(at least so you can say you have experimented with digital audio over radio)
>But if digital voice is going to become a regular form of communication
>for hams (and thats a big IF) it should offer some real advantages over good
>old analog FM. One obvious advantage is that you couldn't be received on any
>normal FM scanners. Another one that comes to mind is since you wouldn't be
>transmitting a phone emission you wouldn't be banned from transmitting
>interesting patterns of bits/waveforms&##
>
> But in order for any digital voice to work at all we will need decent high speed
>RF modulation schemes (if using only moderate compression at a good quality).
>The important issue is how reliable can you make low bit rate digital audio?
>I'm not an expert on digital coding and FEC but I do know a little bit. It
>would seem to me that you would run some kind of FEC to eliminate most single
>bit errors. After that the delta modulated data would be encoded in a small
>block with a few absolute samples and a CRC. If there were byte level errors
>that couldn't be corrected by the FEC you would try and linear interpolate
>between the nearest samples by computing the other relative samples backwards
>from one last absolute sample. I don't think you could have too many byte
>level errors before the guess's would get kind of bad. But then you could
>just resend the block and eliminate almost all the errors!! (pactor style)
>I think this would be pretty incredible if we could do this. I think there
>would be only minor delays or hickups when the signals get hard to decode.
>Usually when you can't understand an FM comunication you have to ask for
>it to be repeated which is at least a 10 sec delay!!

You may want FEC, but resends generally are not satisfactory. You have
to reproduce a continous speech stream, and resends will be unacceptable
at speeds we can reasonably muster. What you do instead is simply output
the bad bits as a brief noise burst, or output a 50% level for bits you
know are bad. IE if you're encoding with 8 bits, uncorrectable bad bytes
are output as 128. Speech is redundant, and there is context to help even
further, so brief strings of uncorrectable bit errors only add a bit of
static to the signal.

The easiest coding scheme for a continous bit stream is block encoding
with Reed Solomon FEC. The way digital video recorders do it is to
encode in a matrix that's written in by rows and read out by columns.
The last row and the last column are the FEC bits. By reading out in
a different order than was written, you "smear" any burst errors over
widely separated parts of the signal block. This gives the FEC a better
chance to correct burst errors. You decode by reversing the process,
writing in by columns and reading out by rows. When you calculate the

cross products, you can correct any single byte error, and you can
interpolate larger errors by using the surrounding bytes as end points.

Gary
--
Gary Coffman KE4ZV |"If 10% is good enough | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | for Jesus, it's good | uunet!rsiatl!ke4zv!gary
534 Shannon Way | enough for Uncle Sam."| emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -Ray Stevens |

412. Re: 9600 baud radio setup

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-28 13:35:39 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1993Sep28.133539.13214@ke4zv.atl.ga.us>
Source record: 51451

In article <gila005-260993180054@right.dom.uab.edu> gila005@uabdpo.dpo.uab.edu (Steve Holland) writes:
>In article <749062480snx@llondel.demon.co.uk>, dave@llondel.demon.co.uk
>(David Hough) wrote:
>>
>> In article <1993Sep25.140026.29435@ke4zv.atl.ga.us> gary@ke4zv.UUCP (Gary Coffman) writes:
>> >bit stuffing. We're only interested in the zero crossings in
>> >order to recover clock and data. A transition during a bit time
>> >means '1' and no transition means '0'. So upside down signals
>> >are as good as right side up signals for recovering the zero
>> >crossings. That's why we have to do bit stuffing BTW, otherwise
>> >a long string of '0's would mean no transitions and the clock
>> >would lose synchronization.
>> >
>> Haven't you got it upside down? You can't have more than five '1's in
>> normal data without a '0' being added. This would suggest that a '0' is
>> the transition and a '1' is a no-change.

Yeah, I got that backwards, dealing with NRZI does that to me. :-(

>There are two issues. For a synchronous channel to run properly there
>is a set flag character. There is bit stuffing in bit streams to
>convert a character that looks like a flag to something special so
>the receive end does not get confused. There is also the sychronization
>matter. Not that I really know, but I am interested learning about
>9600 baud stuff, and I wanted to advertise my ignorance and get the
>protocol clear to me. By the way, is the g3ruh setup fsk or afsk, and
>why is it that QAM is not supposed to work over a radio (why couldn't
>a DSP fix it up?)

You can operate a G3RUH modem either AFSK or FSK, it doesn't care,
but the radio equipment does. The occupied bandwidth will be greater
for AFSK to an FM rig. For a SSB rig there's no difference except for
a frequency displacement that can be compensated by retuning one end
of the link. Naturally both ends of the circuit have to be playing the
same modulation game.

QAM will work over radio, but you need good signals at both ends and
a well characterized system frequency and amplitude response. The
training sequences used on duplex telco circuits don't work on a
half duplex channel so you have to use fixed equalization. That is
likely to only work well between a specific pair of stations. On
the other hand, you don't have to worry about echo cancellation.

Gary
--
Gary Coffman KE4ZV |"If 10% is good enough | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | for Jesus, it's good | uunet!rsiatl!ke4zv!gary
534 Shannon Way | enough for Uncle Sam."| emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -Ray Stevens |

413. Re: Public access Packet question

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-28 15:51:58 UTC
From: drenze@icaen.uiowa.edu
Message-ID: <1993Sep28.155158.22839@news.uiowa.edu>
Source record: 51452

kf5mg@vnet.ibm.com (Jack Snodgrass) writes:

>In <1993Sep27.223326.864@mulvey.com>, rich@mulvey.com writes:
>> I'm trying to figure out whether the following scenario is legal
>>under current FCC regs:
>>
>> I have a Unix box connected to my TNC-2M rig. I would like to set
>>up a public-access land-line BBS for Amateurs that will allow them to dial up
>>my machine, and would then put them into a shell. This shell will
>>automatically set their call-signs, etc, and not allow them to
>>change it. However, they will still be able to connect to our local
>>backbone system, and from there, connect to wherever they want. I'll
>>keep a log of activity on the system, so if something goes wrong, I'll
>>know who to blame. :-) I'd like to give some local people who have
>>computers but no TNCs a taste of what packet can give them.
>>
>> Since I will only allow verified Amateurs on the system, I look at
>>that as giving them permission to be control-ops for my equipment.
>>
>> Does this sound feasible?

>Sounds OK to me. Of course, I'm not the FCC. :) I know that others are
>doing something similar with NOS. NOS has a Phone-Port Login: sequence
>that lets a person call in and gain acess to the radio ports. If someone
>starts transmitting Illegal messages, I don't know if you'll be able to
>say that the person gaining access to your equipment was the control
>operator or not. You may be fined for any infractions of the FCC rules.
>Especially if a non-ham get's in somehow. I think that the Benefits
>outway the risk in this case. Just make sure and don't use first names
>as the password.

Another way to save your tail is to make sure you verify all users ahead of
time...ie, you have a photocopy of their license of the appropriate class
in your file at home (or the ofice, or wherever)...oops, it sounds like you've
maybe thought of that already. :-)

73,

Doug, N0YVW

--
__ /| | Douglas J Renze, N0YVW | Charter Member, Popular Front
\'o.O' | +1 319 337 4664 | for Revolutionary Darwinism:
=(___)= | drenze@isca.uiowa.edu |
U | Douglas-Renze@uiowa.edu | Evolution Now!

414. Re: Responsibility for BBS messages

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-28 19:02:14 UTC
From: lkollar@nyx.cs.du.edu
Message-ID: <1993Sep28.190214.9045@mnemosyne.cs.du.edu>
Source record: 51453

I wrote (in regards to why the FCC requires node operators to be responsible
for messages originating at their nodes):

>|> Probably because it's easy to forge a callsign on packet. If I were to
>|> post something illegal, not that I ever would, :-) I sure wouldn't post
>|> under my own call.
>|>
>|> I can understand it, that doesn't mean I like it.

hanko@wv.mentorg.com (Hank Oredson) writes:

>Odd as it might seem, I can also forge the message headers,
>which are the main way to tell which system might have
>transmitted the message.

>I can't forge the log files at the systems mentioned in the
>forged headers though ... we sysops DO all keep our log files,
>don't we ?

I'm talking about changing MYCALL within the originator's TNC.

In another message, Gary McDuffie compares forging a call on packet to
using a bogus call on a repeater. However, repeaters are not assumed
to be running unattended (like most packet BBSes/forwarding nodes).
[Or are they? Oh well, I'm sure I'll hear about it if I'm wrong. :-)]

Assuming I'm right about repeaters -- the FCC figures we put up with control
operators on repeaters; why shouldn't we put up with the equivalent on packet?

ONCE AGAIN I don't like that our packet network people have to do this,
but I understand why the FCC thinks it's necessary.

[Aside to Hank: are you *THAT* W0RLI? <gush> Maybe you could modify the
BBSware to put incoming (not forwarded) messages into a queue, to make life
easier on the BBS ops?
--
Larry Kollar, KC4WZK | I like CW, but that doesn't mean I think every ham
lkollar@nyx.cs.du.edu | should have to learn it.
"You mean you came back from the dead, to tell me I'm *odd*?"

415. Re: DSP600 phonepatch from JCOM

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-28 19:34:33 UTC
From: sahachai@uhunix.uhcc.Hawaii.EDU
Message-ID: <Pine.3.05.9309280945.D26109-a100000@uhunix.uhcc.Hawaii.Edu>
Source record: 51459

On Tue, 28 Sep 1993, Ham-Digital Mailing List and Newsgroup wrote:

> Subject: DSP600 phonepatch from JCOM
> To: ham-digital@ucsd.edu
>
> I wonder if anyone has had any experience with
> SDP600 phonepatch from JCOM?
> Your commends on this equipment will be very much appreciated.
>
> 73`s de N1HPP,
>
> Ali Taalebi
> taalebi@gel.ulaval.ca
>
I have ordered one from HRO since mid June but never get it yet. I still
don't know how much longer I have to wait. HRO informed me that Jcom did
not give any specific date of delivery. Does any body encountered this
problem?

WH6JB

MMMMM MMM MMMMM MMMM MMMMM MMMMM NOPADON SAHACHAISAEREE **** WH6JB/HS0BRS
MMMMM MMM MMMMMMMMMM MMMMMMM MMM INTERNET*SAHACHAI@UHUNIX.UHCC.HAWAII.EDU
MMMMM MMM MMMMM MMMM MMMM M MMM U. OF HAWAII*****EAST-WEST CENTER HAWAII
MMMMMMMM MMMMM MMMM MMMM MMM PACKET RADIO**********WH6JB@UHM.AMPR.ORG

416. Re: 9600 baud radio setup

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-28 20:29:02 UTC
From: gila005@uabdpo.dpo.uab.edu
Message-ID: <gila005-280993153533@right.dom.uab.edu>
Source record: 51454

In article <1993Sep28.133539.13214@ke4zv.atl.ga.us>, gary@ke4zv.atl.ga.us (Gary Coffman) wrote:
> QAM will work over radio, but you need good signals at both ends and
> a well characterized system frequency and amplitude response. The
> training sequences used on duplex telco circuits don't work on a
> half duplex channel so you have to use fixed equalization. That is
> likely to only work well between a specific pair of stations. On
> the other hand, you don't have to worry about echo cancellation.

I was looking at some spec sheets on 9600 baud chip sets, and I noticed that there was a training mode. Does each modem train itself by listening to it's own signal on the line coming back on landlines? Might it be possible to set up a system where part of the initial connect sequence includes some training as part of a protocol, say like start a packet qso at 1200, then exchange training signals for 9600, confirm at 1200 all was OK, then go to town?

Thanks
Steve

417. RE: Public access Packet question

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-28 20:56:48 UTC
From: mont@ibmmail.COM
Message-ID: <9309282120.AA13843@ucsd.edu>
Source record: 51460

> I have a Unix box connected to my TNC-2M rig. I would like to set
> up a public-access land-line BBS for Amateurs that will allow them to dial up
> my machine, and would then put them into a shell. This shell will
> automatically set their call-signs, etc, and not allow them to
> change it. However, they will still be able to connect to our local
> backbone system, and from there, connect to wherever they want. I'll
> keep a log of activity on the system, so if something goes wrong, I'll
> know who to blame. :-) I'd like to give some local people who have
> computers but no TNCs a taste of what packet can give them.
>
> Since I will only allow verified Amateurs on the system, I look at
> that as giving them permission to be control-ops for my equipment.
>
> Does this sound feasible?

This is almost exactly what we are doing where I work. We have a
company sponsure ham club with a tnc2, 2 com ports, and an AT. One
com port is connected to a data switch and is accessible from any
phone throughout the site that has the data (rs232) option enable.

I wrote some software for the club that listens for a connect request,
prompts users for login info (userid & password), and if valid, then
pipes all i/o from com1 to a tnc2 on com2. This allows all valid
members of the club access to the packet station right from their
desks. The software also supports looking up callsigns, and changing
the packet radio's frequency (another board connected to the parallel
port controls the radio's freq).

I think the FCC wording for this kind of setup is "remotely controlled"
where the control operator is controlling the station from a remote
location. The remotely controlled station could be controlled via
radio link, and/or telephone lines.

As far as forcing the packet callsign to be a certain callsign based
on their login is not really needed. The amatuer acting as the control
operator is still responsible for iding the station. However, it is
still useful, because then the control operator doesn't have to remember
to set it themself (it's easy to forget).

Since you would probably share in the blame if someone illegally used
your station you will need to be careful how you give access to users.
You might want to have them preregister by sending you a copy of their
license, or reguire that their call be found in the latest callbook,
or something like that.

Go for it, and I hope your friends have fun and appreciate your support.

73,
de km6wt, mont@netcom.com mont@ibmmail.com

418. Re: Responsibility for BBS messages

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-28 23:00:42 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1993Sep28.230042.16132@ke4zv.atl.ga.us>
Source record: 51456

In article <1993Sep28.190214.9045@mnemosyne.cs.du.edu> lkollar@nyx.cs.du.edu (Larry Kollar) writes:
>
>In another message, Gary McDuffie compares forging a call on packet to
>using a bogus call on a repeater. However, repeaters are not assumed
>to be running unattended (like most packet BBSes/forwarding nodes).
>[Or are they? Oh well, I'm sure I'll hear about it if I'm wrong. :-)]

Hint, 97.205(d).

Gary

--
Gary Coffman KE4ZV |"If 10% is good enough | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | for Jesus, it's good | uunet!rsiatl!ke4zv!gary
534 Shannon Way | enough for Uncle Sam."| emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -Ray Stevens |

419. Re: Responsibility for BBS messages

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-29 00:25:26 UTC
From: enge@enge.almaden.ibm.com
Message-ID: <28aklm$hjh@juniper.almaden.ibm.com>
Source record: 51455

Of course, you can use "user" authentication. With the AA4RE BBS program, you can make a user authenticate when logging on or only when sending a message. There is also an automated way to authenticate.

Roy Engehausen, AA4RE
enge@almaden.ibm.com

420. Re: Responsibility for BBS messages

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-29 03:37:45 UTC
From: mcduffie@unlinfo2.unl.edu
Message-ID: <28avua$64q@crcnis1.unl.edu>
Source record: 51457

lkollar@nyx.cs.du.edu (Larry Kollar) writes:

~~~~~ deleted ~~~~~

>In another message, Gary McDuffie compares forging a call on packet to
>using a bogus call on a repeater. However, repeaters are not assumed
>to be running unattended (like most packet BBSes/forwarding nodes).
>[Or are they? Oh well, I'm sure I'll hear about it if I'm wrong. :-)]

You must live in the big city. Can you say AUTOMATIC CONTROL? I have
no idea what the numbers are, but I would bet that over 90% of the
repeaters in the country are run under automatic control. Under
automatic control, a repeater is assumed to be used properly until
evidence to the contrary is found. At that time, steps are taken to
keep the event from happening again. There are relatively few
repeaters that have control ops sitting on the edge of their seats,
waiting for someone to utter the wrong words. That's the way the BBS
network should be. Let it run. When an abuser is found, get rid of
him. In the meantime, things flow normally and expeditiously.

>Assuming I'm right about repeaters -- the FCC figures we put up with control
>operators on repeaters; why shouldn't we put up with the equivalent on packet?

Why should we be bothered?

~~~~~ deleted ~~~~~

>--
>Larry Kollar, KC4WZK

How about this aside:

This is off the subject slightly, but it parallels the subject in the
first paragraph. In some areas, it is considered okay to put someone
else's call in your tnc to accomplish a specific task. This may seem
absolutely taboo to some, but stop and think about it for a minute. If
you satisfy the requirement of identification with a UI beacon frame
but have a different callsign in the MYCALL parm, you can check into
the local board with whatever callsign you choose. If you originate a
message while you are on that board, it will show it as coming from
the callsign in your tnc, not the one you are beaconing as an ID. You
think this can't be done? Have you ever heard of an alias? What if my
callsign is AG0N and my alias is WB0KKM? Do you know of a rule that
says your alias can't be something that resembles a callsign? Shall we
get deeper into discussions of callsign legality with the nodes in the
west? How about REN0 or SF0? There are many more.

Things that make you want to say hmmm.....

Gary - AG0N

421. Re: News via FM Subcarriers/receiving data broadcasts

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-29 04:35:41 UTC
From: kors@netcom.com
Message-ID: <korsCE3M3J.HDF@netcom.com>
Source record: 51458

: Anyone out there have any experience getting news & stock info via FM
: subcarrier?

: Most of the wire services are now sending stories out this way, as are lots
: of smaller, specialized information services.

: Some of this info appears to be encrypted; anyone know anything about
: that? What are the best receivers & software packages?

I've tried a lot of systems, most of which are usless for serious stock
trading. The closest that is a real tool is from Data Broadcasting Cor[poration
of San Mateo, CA. I suggest you contact them for detailed information. I have
my SCA receiver for sale are a very good price if you think you'd like to
work with them.. The coding they use is impossible to hack (never say never),
but good luck. There are simplerr way to beat their system, but of course are all illegal.

kors@netcom.com

422. Re: FTP source for JNOS 1.08

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-29 05:17:19 UTC
From: "Seth M. Dworken" <p00123@psilink.com>
Message-ID: <2958354285.11.p00123@psilink.com>
Source record: 51461

>DATE: Tue, 21 Sep 1993 14:34:02 -0600
>FROM: Burt Kaufman <Burt.Kaufman@f40.n382.z1.fidonet.org>
>
>Can anybody point me to a site that has JNOS version 1.08c available for
>anonymous FTP?

Go right to the "source" -- the host is wg7j.ece.orst.edu -- and I
believe the directory names are the version numbers. You'll have to
check that...

>If possible, simple instructions on how to initiate the transfer would
>be helpful as well.

Try the "man ftp" command if you are on a Unix system to read the FTP
manual pages.

ftp wg7j.ece.orst.edu
will open an FTP connection to the specified host

you can issue a "?" to see the list of commands or "?,<command>" with
no quotes or brackets to see a one-line description of <command>.

Use "cd" to change directories on the remote, "ls" or "dir"
to get directory listings.

This one is a MUST for retrieving anything but simple text files --
"binary" which sets binary mode (ascii is the default) and must be used
for any compressed files, including .zip files.

To actually retrieve the file, use the "get" command:
get xyz.zip
assuming you have already set the curent directory. Or, use the full
path.

Then use exit or quit (I forget which) to close the connection and
leave FTP. Happy hunting!

-Seth

423. Re: Responsibility for BBS messages

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-29 06:50:57 UTC
From: dave@esi.COM.AU
Message-ID: <4588@eram.esi.COM.AU>
Source record: 51462

In article <CE15o6.142r@austin.ibm.com>,
miltonm@austin.ibm.com (Milton D. Miller II) writes:

| Evidently, the FCC thinks it
| is too easy to forge a message in someone elses name/call.

It's as trivial as "MYCALL xxxxxx" on your TNC; a spate of which is
happening in Sydney right at this moment (and no, nothing to do with
the Olympics; it's targeted against certain individuals such as myself).

Anyone tried packet DF-ing?

--
Dave Horsfall (VK2KFU) VK2KFU @ VK2RWI.NSW.AUS.OC PGP 2.3
dave@esi.COM.AU ...munnari!esi.COM.AU!dave available

424. NOS on a new machine

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-29 11:50:39 UTC
From: cthomas@athena.mit.edu
Message-ID: <28bsqf$2nv@senator-bedfellow.MIT.EDU>
Source record: 51463

Hi. I just ftp'd both KA9Q NOS and PA0GRI for my PC. I've got Nosview isntalled but can't seem to get it to work, even after reading the manual. I type:

startnos

And that .bat file calls nos_0618.exe or something similar to that. I get an error that that file can't be executed. I try executing it from the command line, and it doesn't work there either.

I have an MFJ-1278 for a TNC. I haven't hooked it up yet. I want to wait to go on air when I'm sure things work.

I also tried out KA9Q NOS. I couldn't get it to work. It wasn't very well documented.

I did end up telnetting to myself in one of the versions, but I can't recall which was which.

Any help on getting either of these to run would be appreciated. I have an IP address and know of the machine around here that will store my mail.

--Michael T. Ford
cthomas@MIT.edu
WZ0C@WA1PHY.#EMA.MA.USA

425. Re: Public access Packet question

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-29 13:26:14 UTC
From: rich@mulvey.com
Message-ID: <1993Sep29.132614.2055@mulvey.com>
Source record: 51464

mont@ibmmail.COM wrote:
: > I have a Unix box connected to my TNC-2M rig. I would like to set
: > up a public-access land-line BBS for Amateurs that will allow them to dial up
: > my machine, and would then put them into a shell. This shell will
: > automatically set their call-signs, etc, and not allow them to
: > change it. However, they will still be able to connect to our local
: > backbone system, and from there, connect to wherever they want. I'll
: > keep a log of activity on the system, so if something goes wrong, I'll
: > know who to blame. :-) I'd like to give some local people who have
: > computers but no TNCs a taste of what packet can give them.
: >
: > Since I will only allow verified Amateurs on the system, I look at
: > that as giving them permission to be control-ops for my equipment.
: >
: > Does this sound feasible?

: This is almost exactly what we are doing where I work. We have a
: company sponsure ham club with a tnc2, 2 com ports, and an AT. One
: com port is connected to a data switch and is accessible from any
: phone throughout the site that has the data (rs232) option enable.

: I wrote some software for the club that listens for a connect request,
: prompts users for login info (userid & password), and if valid, then
: pipes all i/o from com1 to a tnc2 on com2. This allows all valid
: members of the club access to the packet station right from their
: desks. The software also supports looking up callsigns, and changing
: the packet radio's frequency (another board connected to the parallel
: port controls the radio's freq).

: I think the FCC wording for this kind of setup is "remotely controlled"
: where the control operator is controlling the station from a remote
: location. The remotely controlled station could be controlled via
: radio link, and/or telephone lines.

: As far as forcing the packet callsign to be a certain callsign based
: on their login is not really needed. The amatuer acting as the control
: operator is still responsible for iding the station. However, it is
: still useful, because then the control operator doesn't have to remember
: to set it themself (it's easy to forget).

: Since you would probably share in the blame if someone illegally used
: your station you will need to be careful how you give access to users.
: You might want to have them preregister by sending you a copy of their
: license, or reguire that their call be found in the latest callbook,
: or something like that.

Well, my plan is to allow access only to those people who have sent me license copies and who I can reach by phone (or repeater ;-) While I feel enough altruism to allow people to use my equipment, it isn't strong enough that I'm willing to risk getting a NAL from Unc Sam, so it's not going to be open to every Amateur in the area.

My rational for providing them with a shell that automatically sets up their callsign and connects them to the backbone is to eliminate the problem you noted about forgetting to set MYCALL, and also to simplify matters for the neophytes that I'm targeting.

- Rich
--
Rich Mulvey Amateur Radio: N2VDS Rochester, NY
rich@mulvey.com "Ignorance should be painful."

426. simtel20 going away for good

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-29 14:28:31 UTC
From: LSPRINGSTEEN@wsmr-simtel20.army.mil
Message-ID: <12913098483.21.LSPRINGSTEEN@WSMR-SIMTEL20.ARMY.MIL>
Source record: 51469

```
Greetings All,
I have known for some time that the Simtel20 was going to be trashed on
the 30 of September. I have seen no word of it on this thread. I signed on
this morning and got this message:

WSMR-SIMTEL20.ARMY.MIL, PANDA TOPS-20 Monitor 7.1(21733)-4
The system will go down 30-Sep-93 16:00:00 until 1-Jan-2000 00:00:00
for Final shutdown of SIMTEL20

------------------------------------------------------------------------
| Unauthorized access to this computer system is prohibited and is |
| subject to criminal and civil penalties (18 USC 1030 and 18 USC 2701). |
------------------------------------------------------------------------

Please send all SIMTEL20 problem reports via email to ACTION.

*** Due to funding constraints, realignment of mission ***
*** functions, and Department of Army downsizing; ***

*** SIMTEL20 will cease operations !!! ***
*** 30 SEPTEMBER 1993 - 1600 HOURS MDT ***

*** There are two days more of SIMTEL20 operations! ***
*** ***

If there is anything you want to download from the massive MS-DOS
archives, the next day or so is all you have.
I still don't know if this newsgroup will be supported by the other
system at White Sands Missile Range.
I've enjoyed the high level of technicial discussions and hope that the
other system will get this newsgroup in the future.
My old address: lspringsteen@wsmr-simtel20.army.mil
My new address: lsprings@wsmr-enh15.army.mil
Packet: WB8LBZ @ K5WPH.NM.USA.NA

73 for now, Larry
-------
```

427. Telnet-2m Gateways?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-29 15:48:13 UTC
From: topolski@kaiwan.com
Message-ID: <CE4H8D.1MH@kaiwan.com>
Source record: 51465

Does anyone have a current list of the available telnet->packet gateways
available?
--
Robert M. Topolski <topolski@kaiwan.com>

428. test

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-29 16:11:51 UTC
From: CE2USM@loa.disca.utfsm.CL
Message-ID: <9309291320.AA00508@ucsd.edu>
Source record: 51468

```
'lo all!
Sorry for test... but I want to know if I'm posting 100% or not
before send anything... :)))

ROD.
```

429. Re: 32 bit versions of NET/NOS for OS/2?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-29 16:51:39 UTC
From: jack@jspitznagel.utmem.edu
Message-ID: <CE4K64.I70@dptspd.sat.datapoint.com>
Source record: 51466

In article <16039017@MVB.SAIC.COM> jcp@logjam (John C. Peterson) writes:
>
> I'm wondering what versions of KA9Q NET/NOS are available for OS/2. Of
>course one can run any of the MS-DOS versions in a DOS session, but I'm
>most interested in 32 bit OS/2 versions.

Walt is the sole individual that ported NOS.... PMNOS v1.1 is 32-bit but is missing network support, just functions through serial port to TNC or modem... However the concept of a monolithic tcp suite under OS/2 is silly, there are some very nice support suites out there already for tcp/ip-- only thing missing is an ax.25 driver and a few more arcane bits and pieces.....

Walt only intends for PMNOS to be a first iteration to bring an amateur radio enabled version to OS/2. He is working on a complete rethink and re-write... starting with a mailer that will be completely object oriented and based in the WPS/SOM... this should provide portability to the Workplace OS (OS/3??) and to the Taligent operating system (Pink.) It should ultimately be VERY portable.

There is a group that is working on an "open" tcp stack for OS/2 based at U Mich or someplace..... I will post the list name if there is interest.

Jack KD4IZ
Team OS/2

430. Re: Any experience from delta modulation??

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-29 17:15:22 UTC
From: cole@soldev.tti.com
Message-ID: <cole.324.749322922@soldev.tti.com>
Source record: 51472

In article <1993Sep28.132547.13088@ke4zv.atl.ga.us> gary@ke4zv.atl.ga.us (Gary Coffman) writes:

>You may want FEC, but resends generally are not satisfactory. You have
>to reproduce a continous speech stream, and resends will be unacceptable
>at speeds we can reasonably muster. What you do instead is simply output
>the bad bits as a brief noise burst, or output a 50% level for bits you
>know are bad. IE if you're encoding with 8 bits, uncorrectable bad bytes
>are output as 128. Speech is redundant, and there is context to help even
>further, so brief strings of uncorrectable bit errors only add a bit of
>static to the signal.

There are many ways to deal with a known bad speech sample, but outputting a "50% level" isn't one of them. The simplest is to repeat the previous sample. A better, but not quite as simple, method is to interpolate between the preceding and following samples. An evnn better way is to run a short predictor at the decoder.

The original poster was talking about delta modulation, so we're not talking about bad output speech samples anyway, but rather about bad quantized deltas. The effects of a single error can be felt for a long time.

In a packet system the lower-level protocols probably aren't going to pass up bad packets anyway.

The first packet voice experiments I know of were done in 1974 over what was then called the Arpanet. Interestingly enough, delta modulation was used for those experiments, namely 8 kilobit/sec CVSD.

Randy Cole
KN6W
cole@soldev.tti.com

431. HF Packet

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-29 17:24:00 UTC
From: scott migaldi <scottm@csg.mot.com>
Message-ID: <749323324-0-16013@chop.isca.uiowa.edu>
Source record: 51471

I have recently put my HF packet station on the air. I would like to know what is the preferred way to initiate contacts with other packet operators (real people not BBS's). Also other than 14.1 MHz what freqs will I find packet operation?

432. Re: News via FM Subcarriers/receiving data broadcasts

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-29 17:41:04 UTC
From: shibumi@joes.garage.com
Message-ID: <Sep.29.10.41.04.1993.12006@joes.garage.com>
Source record: 51467

jubois@netcom.com (Jeff Ubois) writes:
>Some of this info appears to be encrypted; anyone know anything about
>that? What are the best receivers & software packages?

The ones sold by the service providers -- this information is not intended
for general public consumption (except by subscription) and is protected by
ECPA.

| Kenton A. Hoover |
| P.O. Box 882643 +1 415 957 3614 |
| San Francisco, Kalifornia 94188-2643 shibumi@joes.garage.com |
|==============442.075+100=146.850+=444.625+131.8=440.900+114.8==============|
| "Answer the door! It is Phil, who brings with him the constant promise of |
| pleasure and fulfillment in its most primitive form." |

433. HF Packet

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-29 18:21:30 UTC
From: scott migaldi <scottm@csg.mot.com>
Message-ID: <749326775-0-16660@chop.isca.uiowa.edu>
Source record: 51470

I just got my HF packet station operational and I would like to know the preferred way of making contacts with real people not the BBSs. Also other than the 14.1 MHz area where else is packet on HF.
Thanks,
Scott - KF5JQ

434. Soundblaster (tm) for multi-mode digital communications ??

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-29 18:46:26 UTC
From: cnc23a@b4pph13e.bnr.ca
Message-ID: <1993Sep29.184626.18738@brtph560.bnr.ca>
Source record: 51479

I recently saw an advertisement in QST of a software program that will
use the Soundblaster(tm) for SSTV decoding. I know of a public domain program
that uses the Soundblaster(tm) for DTMF decode. The VOICEBLASTER (tm) product
will do voice recognition.

This leads to a simple question : "Can the Soundblaster (tm) be programmed to
do all the 1200, 2400, 9600, afsk, psk, etc. TNC work, (Color) SSTV, WEFAX,
RTTY, CW, AMTOR, FAX, PACTOR, CCTSS, DTMF, etc. etc. work that a multi-mode digital
controller does ?" I realize there would need to be some sort of IO
board/port to to tramsmitter keying, but is it possible ?

--
==========

Ken M. Edwards, PE Bell Northern Research, Research Triangle Park, NC
(919) 481-8476 email: cnc23a@bnr.ca Ham: N4ZBB

All opinions are my own and do not necessarily reflect the views of
my employer or co-workers, family, friends, congress, or president.

Let this be the day...
when you stop just thinking about your dreams,
and you start doing something to make them happen!
Let this be the day...
you give your best,
believe that you can make a difference in the world,
because it's true!
Let this be the day...
when you can honestly say
you've lived life to the fullest.
Linda Lee Elrod

435. HF Packet

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-29 20:25:22 UTC
From: scott migaldi <scottm@csg.mot.com>
Message-ID: <749334207-0-18318@chop.isca.uiowa.edu>
Source record: 51473

My HF packet station is now on the air. Can someone please advise me as to the preffered way to make contacts with other ops not BBSs. Also other than 14.1 Mhz where does HF packet operate?
Tnx
Scott -- KF5JQ

436. Re: 9600 baud radio setup

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-29 20:33:56 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1993Sep29.203356.22226@ke4zv.atl.ga.us>
Source record: 51474

In article <gila005-280993153533@right.dom.uab.edu> gila005@uabdpo.dpo.uab.edu (Steve Holland) writes:
>In article <1993Sep28.133539.13214@ke4zv.atl.ga.us>, gary@ke4zv.atl.ga.us
>(Gary Coffman) wrote:
>> QAM will work over radio, but you need good signals at both ends and
>> a well characterized system frequency and amplitude response. The
>> training sequences used on duplex telco circuits don't work on a
>> half duplex channel so you have to use fixed equalization. That is
>> likely to only work well between a specific pair of stations. On
>> the other hand, you don't have to worry about echo cancellation.
>
>I was looking at some spec sheets on 9600 baud chip sets, and I noticed
>that there was a training mode. Does each modem train itself by listening
>to it's own signal on the line coming back on landlines? Might
>it be possible to set up a system where part of the initial connect
>sequence includes some training as part of a protocol, say like start
>a packet qso at 1200, then exchange training signals for 9600, confirm
>at 1200 all was OK, then go to town?

The Japanese have been using a FAX/modem chip for packet for a while.
TAPR did some work with it as well. As I understand it, the chip
does a training sequence automatically each time it starts a transmission.
Since that's every packet, and the training sequence is several seconds
long, and requires a cooperative duplex response from the other end, it's
pretty useless that way. There is a "test" mode you can force the chip into
where it doesn't do training. That works, but then you're back to external
fixed equalization. So it appears that what you want could be done, but
there's no off the shelf phone chip that will do it.

Gary
--
Gary Coffman KE4ZV |"If 10% is good enough | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | for Jesus, it's good | uunet!rsiatl!ke4zv!gary
534 Shannon Way | enough for Uncle Sam."| emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -Ray Stevens |

437. MULTICOMM V3.0

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-30 00:13:42 UTC
From: gc034@un.seqeb.gov.au
Message-ID: <CE54Mu.4Hy@un.seqeb.gov.au>
Source record: 51475

[No readable article body recovered]

438. Need advice in Germany

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-30 00:36:10 UTC
From: amatthi1@gwdu03.gwdg.de
Message-ID: <22QHBRIG@gwdu03.gwdg.de>
Source record: 51476

Hi,

I want to begin setting up an amateur radio system and I need some
advice and guidance from someone who has some experience with these
things and who would like to answer some questions via e-mail.
German contacts preferred, because I also have questions about obtaining
the right equipment in Germany (sources, prices etc)

Thanks, Andreas

PS. Please answer to andreas_matthias@rollo.central.de if possible.

439. MULTICOMM V3.0

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-30 03:07:38 UTC
From: gc034@un.seqeb.gov.au
Message-ID: <CE5Cor.8vx@un.seqeb.gov.au>
Source record: 51477

[No readable article body recovered]

440. Re: <none>

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-30 05:31:01 UTC
From: fmitch@netcom.com
Message-ID: <fmitchCE5JBq.1Lz@netcom.com>
Source record: 51478

Nels Harvey (NHAR000@MUSIC.LIB.MATC.EDU) wrote:

: In the Southeastern Wisconsin area, we are trying to upgrade the
: backbone from 4800 baud to 9600 baud. My problem is, a Kantronics data
: engine, an MFJ 1274, an MFJ 9600 baud modem, a deviation of 3 KHz. all
: at about 200 ft. doesn't work! 4800 baud works fine!

: We are using Icom 3200's as part of the 9600 baud network. They talk
: to each other!

: I'm open to any suggestions to get this Kilobuck project resolved. We
: don't have a path problem, this isn't working on the bench! Is there
: something I've overlooked?

: Has anyone had problems with the Data Engine?

Hi Nels. I am using the Data Engine with a Alinco DR-1200 on the
DX Cluster backbone here in Mobile and it works great. At last
count, we had 19 Data Engines (most running BPQ code) on the
Gulf Net Backbone. They work great. I suggest you get a good
service monitor and look at your rf. The best service monitor
we have found to use is an IFR1200S. You can tell instantly
by the "eye" pattern on the sm what the source of your problem
is. You can see if you have too much phase jitter (multiple
squiggly lines), AMing (multiple top and bottom lines) or just
plain distortion. The service monitor is the *_ONLY_* way to
get your 9600 going! I speak from experience! The expert
on Data Engines and 9600 baud is Jim Moore, WU3V in Lafayette,
LA., 318-893-9455 home, 318-231-6141 work. Good luck!

Mitch, WA4OSR

--
fmitch@netcom.com
Felton Mitchell, WA4OSR in Mobile, Alabama USA
co-sysop for W4IAX bbs running fbb ... sysop for WA4OSR DXCluster in Mobile..

441. MULTICOMM V3.0

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-30 07:09:04 UTC
From: gc034@un.seqeb.gov.au
Message-ID: <CE5nv4.HC7@un.seqeb.gov.au>
Source record: 51481

[No readable article body recovered]

442. MULTICOMM V3.0

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-30 07:29:12 UTC
From: gc034@un.seqeb.gov.au
Message-ID: <CE5osp.I9o@un.seqeb.gov.au>
Source record: 51480

[No readable article body recovered]

443. Tiny 2 - 156.3KHz tap ?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-30 11:55:04 UTC
From: johna@icsbelf.co.uk
Message-ID: <CE613t.1Czq@icsbelf.co.uk>
Source record: 51390

Hi all,

Can anyone tell me where to find a source for 156.3 KHz clock on the Tiny-2
circuit board ? I need this clock speed for use with a 9600Bd modem.

All answers gratefully received !
--

John Agnew, | johna@icsbelf.co.uk
ICS Computing Group Ltd, | ...!uknet!icsbelf!johna
Belfast (Northern Ireland) | Gi6IRL@GB7TED.GBR.EU [44.131.15.11]

444. Re: Responsibility for BBS messages

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-30 12:53:03 UTC
From: pcr@vnet.ibm.com
Message-ID: <CE63sF.1Brp@hawnews.watson.ibm.com>
Source record: 51482

In <1993Sep28.230042.16132@ke4zv.atl.ga.us> gary@ke4zv.atl.ga.us (Gary Coffman) writes:
>In article <1993Sep28.190214.9045@mnemosyne.cs.du.edu> lkollar@nyx.cs.du.edu (Larry Kollar) writes:
>>
>>In another message, Gary McDuffie compares forging a call on packet to
>>using a bogus call on a repeater. However, repeaters are not assumed
>>to be running unattended (like most packet BBSes/forwarding nodes).
>>[Or are they? Oh well, I'm sure I'll hear about it if I'm wrong. :-)]
>
>Hint, 97.205(d).
>
>Gary

Is the entire text of Part 97 available someplace for FTP?

...phil

---

phillip c. reed
pcr@vnet.ibm.com / KD4PWI@N4YUU.CKY.KY.USA.NA / CI$:72754,513
* It is highly unlikely that the opinions expressed herein are those of IBM *
* or any of it's operating units. *

445. Kenwood TS-950SD customer satisfaction

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-30 13:22:55 UTC
From: Paul_Adler.NER-OSM@xerox.COM
Message-ID: <"30-Sep-93..9:22:55.EDT".*.Paul_Adler.NER-OSM@Xerox.com>
Source record: 51484

Back in December 1992 I submitted this letter to the Correspondence Section of QST after reading the review of the TS-950SDX.

In the opening paragraph of the Kenwood TS-950SDX review (December 92 QST) Rus Healy states " It had better be something really special, you're thing, otherwise Kenwood would have alot of explaining to do as why they released this rig less than two years after its predecessor!"

Well, I am one of many Hams who bought a TS-950SD and would like to have an explanation from Kenwood. Was the TS-950SD a field test or a marketing probe? Were they working on the TS-950SDX and need to release a earlier version due to competition?

Lets hope customer satisfaction and customer loyalty is still the most important product a company like Kenwood could produce.

---end of letter to QST---

Let me know if you have any ideas on what I can do... Maybe getting a list of all known TS-950SD owners on the net and all on the same day send a letter to Kenwood complaining about this problem. If they get enough letters in one week maybe they would notice!

Paul KW1L
Paul_Adler.NER-OSM@xerox.com

446. Re: Packet Monitoring

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-30 14:00:33 UTC
From: jack@jspitznagel.utmem.edu
Message-ID: <CE66wz.59L@dptspd.sat.datapoint.com>
Source record: 51483

In article <CE4p9F.D8o@mailer.cc.fsu.edu> bischoff@freenet.scri.fsu.edu (Bill Bischoff) writes:
>I am a newcomer to packet and want to start out just "reading the >mail" for a while. I am using the simple interface that Bill >Nolle sells and a AT class pc. My question is: can anyone >suggest some decent software I can use to first monitor and later, >once I get the hang of packet, to Tx as well?? I have PKTMON now >which allows pure monitoring but I'd like something simple (if >possible) which will TX too.

I'm not sure which interface Bill Nolle sells, but if it is related to the Baycom modem, you should use your Internet access to get the ax.25 packet driver from ucsd.edu. This plus a copy of KA9Q NOS -- (Try the JNOS flavor!) will allow you to monitor AND eventually join in on ALL forms of packet out there. The learning curve is a little steep at first, but the long range advantages are great!

Jack Spitznagel DDS PhD
KD4IZ
UT Memphis
Team OS/2

447. PD OS/2 TCP/IP stack development effort

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-30 14:06:07 UTC
From: jack@jspitznagel.utmem.edu
Message-ID: <CE6769.5DK@dptspd.sat.datapoint.com>
Source record: 51485

Several have asked me to pass on the address of the group for development
of a public domain tcp/ip stack for OS/2.

The group is: os2ip@its.flint.umich.edu

Try subscribe to os2ip-request@its.flint.umich.edu

There has been a recent flurry of discussion about what NIC Driver
standard to use (NDIS/ODI/etc...) and about driver construction in
general....

Jack Spitznagel
TeamOS/2

448. Tiny 2 - 156.3KHz tap ?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-30 15:06:50 UTC
From: johna@icsbelf.co.uk
Message-ID: <CE69zE.yKs@icsbelf.co.uk>
Source record: 51391

Hi all,

Can anyone tell me where to find a source for 156.3 KHz clock on the Tiny-2
circuit board ? I need this clock speed for use with a 9600Bd modem.

All answers gratefully received !

John

--

John Agnew, | johna@icsbelf.co.uk
ICS Computing Group Ltd, | ...!uknet!icsbelf!johna
Belfast (Northern Ireland) | Gi6IRL@GB7TED.GBR.EU [44.131.15.11]

449. Re: HF Packet

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-30 15:07:08 UTC
From: scott migaldi <scottm@csg.mot.com>
Message-ID: <749401515-0-25163@chop.isca.uiowa.edu>
Source record: 51487

Sorry about posting this three times but I was having trouble with the server.
It kept giving error messages but it looks like it sent the posts anyways.

450. Looking for PCMICA radio

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-30 15:14:09 UTC
From: Lok Liu <ll2c+@andrew.cmu.edu>
Message-ID: <YgejT1C00WBNA3E81k@andrew.cmu.edu>
Source record: 51486

I hope this is the right place to post this message. Right now I am working on a research project. But I run into to trouble in finding the components that I need. Does anyone know where I can find a PCMICA two ways radio or fax/data modem that consumes very little power? If you do, can you tell me where I can find the specification on those parts.

Thank you

-Lok

451. BAYCOM does not run under OS/2

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-09-30 15:18:48 UTC
From: ignacy@ux2.cso.uiuc.edu
Message-ID: <28etco$6k9@vixen.cso.uiuc.edu>
Source record: 51488

I can't get BAYCOM to run under OS/2. I tried many options in the DOS window. Under OS/2, BAYCOM never receives any packet, and it terminates due to illegal instruction

I prefer to run BAYCOM under OS/2 because the computer is not tied up.

If possible, please respond to the address below.

Ignacy Misztal, NO9E, SP8FWB
ignacy@uiuc.edu

452. Re: FTP source for JNOS

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-01 00:26:04 UTC
From: Burt.Kaufman@f40.n382.z1.fidonet.org
Message-ID: <749500213.AA00139@afarm.uucp>
Source record: 51404

-=> Quoting "seth M. Dworken" to All <=-

>Can anybody point me to a site that has JNOS version 1.08c available for
>anonymous FTP?

"MD> Go right to the "source" -- the host is wg7j.ece.orst.edu -- and I
"MD> believe the directory names are the version numbers. You'll have to
"MD> check that...

>If possible, simple instructions on how to initiate the transfer would
>be helpful as well.

"MD> Try the "man ftp" command if you are on a Unix system to read the FTP
"MD> manual pages.

The reason I asked, is, of course, that I CAN'T do that. If I had
regular net access, I wouldn't be trying to get TCP/IP going over
Packet. I am attempting to route info/software via packet to/from
the Internet. Don't tell me I have to have access to get the files
so I can get access! I do have a couple of friends that can download
files, IF given precisely detailed instructions.

Burt N5SYY

... "Practicing the martial arts assures a long life." - Bruce Lee
___ Blue Wave/QWK v2.12

453. MacTCP radio driver?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-01 03:33:19 UTC
From: ewing@cis.yale.edu
Message-ID: <1993Oct1.033319.10927@news.yale.edu>
Source record: 51489

It seems that one approach to Macintosh tcp/ip radio would be to do away with ka9q (Net/Mac, not the person :-) and use the standard MacTCP network package that we use on Ethernet or LocalTalk. One would need a driver to tell it about AX.25. After you had that, you could use NCSA Telnet, and various other PD Mac packages.

Has anyone done this or looked into it?

73,
Martin Ewing, AA6E
Yale Univerity, ewing-martin@yale.edu

454. ALR22E for 9600bd

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-01 11:56:24 UTC
From: johna@icsbelf.co.uk
Message-ID: <CE7vu1.1BCK@icsbelf.co.uk>
Source record: 51392

Hi All,

Has anyone any details of connecting an Alinco ALR22 (E or A) up to a
9600 Bd packet modem ? Any information would be useful.

Thanks in advance.
--

John Agnew, | johna@icsbelf.co.uk
ICS Computing Group Ltd, | ...!uknet!icsbelf!johna
Belfast (Northern Ireland) | Gi6IRL@GB7TED.GBR.EU [44.131.15.11]

455. (none)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-01 12:28:22 UTC
From: umlee174@CC.UManitoba.CA
Message-ID: <9310011228.AA23455@ccu.umanitoba.ca>
Source record: 51393

please unsubscribe me to this list.

456. Amiga packet software wanted

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-01 12:46:32 UTC
From: fvdbord@cbnewsg.cb.att.com
Message-ID: <CE7y5L.KGv@cbfsb.cb.att.com>
Source record: 51394

Can anybody give me information on the following:

I have:
an Amiga A1000
simple 1200bd modem
Yaesu transceiver

Is there software available for Amiga that I can use for
packet radio? Where can I get it ?

Thanks in advance

Frank van der Borden
fvdbord@ihlpw.att.com

457. Parts search

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-01 13:34:04 UTC
From: kharker@bnr.ca
Message-ID: <28hbkc$t08@crchh973.bnr.ca>
Source record: 51395

I'm looking to make a longer cable for my packet setup than the one I
am using now, and I am wondering something. You know those plugs on the
end of external speaker/mics designed for HTs? You know, the plug with
both the mini and sub-mini plugs side-by-side? MFJ sells some pre-fab
tnc<->ht cables with this plug on the ht end of things.
Anybody know of a source I could buy just the plug from? I'd like
to solder my own cable into it so I don't have two plugs to deal with
everytime I plug or unplug my ht from the tnc...

Thanks.

--
==
Kenneth E. Harker Bell Northern Research "Any opinions expressed
kharker@bnr.ca Richardson, Texas, USA are solely mine and do
N1PVB (214) 684-5115 not represent BNR"
==

458. Re: MacTCP radio driver?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-01 15:13:57 UTC
From: emery@bert.cs.byu.edu
Message-ID: <EMERY.93Oct1091359@bert.cs.byu.edu>
Source record: 51401

On Fri, 1 Oct 1993 03:33:19 GMT, ewing@cis.yale.edu (Martin Ewing) said:
> Nntp-Posting-Host: capstan.secf.cis.yale.edu

> It seems that one approach to Macintosh tcp/ip radio would be to
> do away with ka9q (Net/Mac, not the person :-) and use the standard
> MacTCP network package that we use on Ethernet or LocalTalk. One
> would need a driver to tell it about AX.25. After you had that, you
> could use NCSA Telnet, and various other PD Mac packages.

This sounds like a good idea, but it would need to be modified so that you could receive mail. It would also need to have improved routing so that you could digipeat through various nodes. The way it is now, I believe that everything not on your subnet must be routed to one specific gateway whereas I might want to digipeat through someone else even if he is on my subnet.

> Has anyone done this or looked into it?

> 73,
> Martin Ewing, AA6E
> Yale Univerity, ewing-martin@yale.edu

Emery, KB7TER

459. FTP site for Baycom TCP/IP?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-01 15:30:34 UTC
From: R3KTD@VM1.CC.UAKRON.EDU
Message-ID: <16C5AA1DA.R3KTD@VM1.CC.UAKRON.EDU>
Source record: 51397

I saw not long ago, a message concerning running Baycom with NOS.
Does anyone know an FTP site where I can get the AX25DRV driver? Also,
I guess there is a program GP which is Baypac modem compatible. Any
idea where I can find this also?
TNX - karl - n8pkb
---
karl@marconi.w8upd.uakron.edu
r3ktd@vm1.cc.uakron.edu
n8pkb@wa8dce.#neoh.oh.usa.na
Optimism is my philosophy; cynacism is my survival.
---

460. Re: Parts search

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-01 15:32:01 UTC
From: rich@mulvey.com
Message-ID: <1993Oct1.153201.14483@mulvey.com>
Source record: 51396

Kenneth E. Harker (kharker@bnr.ca) wrote:

: I'm looking to make a longer cable for my packet setup than the one I
: am using now, and I am wondering something. You know those plugs on the
: end of external speaker/mics designed for HTs? You know, the plug with
: both the mini and sub-mini plugs side-by-side? MFJ sells some pre-fab
: tnc<->ht cables with this plug on the ht end of things.
: Anybody know of a source I could buy just the plug from? I'd like
: to solder my own cable into it so I don't have two plugs to deal with
: everytime I plug or unplug my ht from the tnc...

Go to your local hamfest, buy an Icom mike, and cut the mike off.
That's what I did. :-)

- Rich
--
Rich Mulvey Amateur Radio: N2VDS Rochester, NY
rich@mulvey.com "Ignorance should be painful."

461. Can packet radio be used with mobile sites?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-01 15:40:44 UTC
From: wegrzyn@nic.cerf.net
Message-ID: <28hj1s$jmk@news.cerf.net>
Source record: 51402

Hello. I am trying to build a packet radio network for a couple of police departments in Northeastern Mass. The radio vendor wants to use a PAD/modem from Data Radio. The Data Radio guy told me that you can't use just any PAD/modem for mobile data (as in cars), you need a special PAD/modem -- theirs. This seems bogus to me, but not being a Ham or having practical amateur experience I just don't know for sure. Can anyone tell me if this is jive?

Also since I am going to be adapting Windows for Workgroups to use the packet radio network, I was going to release my work into the public domain. Data Radio wants me to sign a non-disclosure with them to use the PAD/modem -- to program to the interface. This would prevent me from releasing my work to the public. Does any one have any suggestions of what PAD/modem to use. We are going to be using the 800MHz frequency and want 4800 to 9600 baud (the Data Radio is 4800). I will be running the NetBIOS/NetBEUI protocol over the PAD/modem.

Any help would be very appreciated. Thank you very much.

Chuck Wegrzyn
wegrzyn@cerf.net

462. Re: Tiny 2 - 156.3KHz tap ?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-01 17:28:10 UTC
From: glenne@sad.hp.com
Message-ID: <CE8B6z.K05@srgenprp.sr.hp.com>
Source record: 51398

John Agnew (johna@icsbelf.co.uk) wrote:
: Hi all,

: Can anyone tell me where to find a source for 156.3 KHz clock on the Tiny-2
: circuit board ? I need this clock speed for use with a 9600Bd modem.

John

Try pin 3 of U7, the 16 pin DIP IC furthest forward and furthest left on the
board. It should have a silkscreened reference designator along the
left edge so you can be sure.

Glenn Elmore n6gn

N6GN @ WX3K
amateur IP: glenn@SantaRosa.ampr.org
Internet: glenne@sr.hp.com

463. 9600 baud modem setup

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-01 17:46:03 UTC
From: mcdermot@eagle.aud.alcatel.com
Message-ID: <9310011746.AA00381@eagle.aud.alcatel.com>
Source record: 51399

I've not tried to post via this indirect method before, I hope it ends up
in the right place. This is in response to Gary Coffman

Gary: The original K9NG, and the TPRS 9600 baud modem (my design) both
use NRZ (not NRZI) modulation, and thus the polarity of the received signal is
very important for those two modems. I have had to build op-amp inverters
in several radios to make sure that they will operate with our TPRS
TexNet network (such as the Johnson PPL6060A).

- Tom, N5EG

PS: in reading the newsgroups, I notice that you consistently have extremely
good responses to the technical questions.

464. Re: Responsibility for B

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-01 17:55:06 UTC
From: Burt.Kaufman@f40.n382.z1.fidonet.org
Message-ID: <749500213.AA00140@afarm.uucp>
Source record: 51405

-=> Quoting Milton D. Miller Ii to All <=-

MDMI> My understanding is that the ARRL wanted originator only, but the
MDMI> FCC said "no way, not until **** freezes over" or something close,
MDMI> so the ARRL took the next best thing. Evidently, the FCC thinks it
MDMI> is too easy to forge a message in someone elses name/call.

Okay. But how is the first forwarder supposed to know whether or
not the call sign was faked? How will this help?

Or is the FCC's idea that faked call/no license is okay as long as
its not obscene or business oriented?

Burt N5SYY

... Danger, Will Robinson, danger!
___ Blue Wave/QWK v2.12

465. BAYCOM does not run under OS/2

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-01 19:47:58 UTC
From: William=E.=Newkirk%Pubs%GenAv.Mlb@ns14.cca.CR.rockwell.COM
Message-ID: <9310011949.AA04499@ucsd.edu>
Source record: 51400

>I can't get BAYCOM to run under OS/2. I tried many options in the DOS
>window. Under OS/2, BAYCOM never receives any packet, and it
>terminates due to illegal instruction
>I prefer to run BAYCOM under OS/2 because the computer is not tied
>up.
>Ignacy Misztal, NO9E, SP8FWB

didja try the VMB method also (dos image boot) or just OS/2 in VDM (OS/2
emulates DOS) method? i've got a couple of things (old sony cd-rom, and 1
program) that work better under a DOS image than under OS/2's "DOS session".

bill wb9ivr

466. Re: Packet Monitoring

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-01 21:26:25 UTC
From: mike@uxp.bs2.mt.nec.co.jp
Message-ID: <MIKE.93Oct1172625@allegro.uxp.bs2.mt.nec.co.jp>
Source record: 51403

>>>>> On Wed, 29 Sep 1993 18:41:39 GMT, bischoff@freenet.scri.fsu.edu (Bill Bischoff) said:

> I am a newcomer to packet and want to start out just "reading the
> mail" for a while. I am using the simple interface that Bill
> Nolle sells and a AT class pc. My question is: can anyone
> suggest some decent software I can use to first monitor and later,
> once I get the hang of packet, to Tx as well?? I have PKTMON now
> which allows pure monitoring but I'd like something simple (if
> possible) which will TX too.

I am doing precisely that with PMP (Poor Man's Packet) and Baycom.
Both require a slightly more sophisticated interface. Just connect to
the LS or headphone output and leave PTT and TX connections loose.
The PMP modem you have to build yourself, the Baycom modem you build
yourself or buy in various low-cost commercial guises (Baypac is one
?). Other software such as KA9Q aka NOS can also be used with the
Baycom modem with appropriate drivers.

By the way, as the output of both is ordinary audio you can play
around with the transmit functions to some extent by a back to back
setup with two PC's or with a tape recorder. You can try all the
"what if I ..."s you like !

As far as I can see, and I'm just learning too, there is nothing special
about monitoring so any TNC hardware/software combination with a
receiver or transceiver would do as long as you take appropriate steps
to avoid triggering transmit.
--

Mike Collinson
Assistant Manager, Product Engineering Dept., UX Software Development Div.,
NEC Corporation, Daito Tamachi Building, 14-22 Shibaura 4-Chome,
Minato-ku, Tokyo 108, JAPAN
Email: mike@uxp.bs2.mt.nec.co.jp Fax:+81-3-3456-6675
Tel:+81-3-3456-7451
----

467. DVR4-10's @ 450mhz

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-01 22:32:24 UTC
From: dewaldz@ingersoll.COM
Message-ID: <9310020032.AA07674@ingersoll.com>
Source record: 51407

We are in the process of setting up a local 9600 backbone link on 70cm here,
and one of the participants has purchased a Kantronics D4-10 radio for his end.
The link is on 440.050 mhz. The Kantronics manual leads one to believe these
radios can't go this high in frequency. Anyone have any luck with these rascals
above 440mhz?
Any feedback would be appreciated.

--
--
Dave

+---+
| Dave Ewaldz THE INGERSOLL MILLING MACHINE CO. |
| Rockford, Illinois, Usa |
| |
| Internet - dewaldz@ingersoll.com |
| Amprnet - n9hkm%n9hkm.ampr.org@ke9yq.ampr.org |
| [44.72.75.33] |
| ax25 mail - n9hkm@n9hkm.#ncil.il.usa.na |
| Ma-Bell - (815)-633-7031 |
+---+

468. Re: MacTCP radio driver?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-02 16:11:03 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1993Oct2.161103.5586@ke4zv.atl.ga.us>
Source record: 51406

In article <1993Oct1.033319.10927@news.yale.edu> ewing@cis.yale.edu (Martin Ewing) writes:
>It seems that one approach to Macintosh tcp/ip radio would be to
>do away with ka9q (Net/Mac, not the person :-) and use the standard
>MacTCP network package that we use on Ethernet or LocalTalk. One
>would need a driver to tell it about AX.25. After you had that, you
>could use NCSA Telnet, and various other PD Mac packages.
>
>Has anyone done this or looked into it?

There's a problem with using native TCP/IP for this purpose. You
can't set the parameters to avoid sending a packet storm on
connection attempts. The timing will be for ethernet or localtalk
rather than for a AX25 radio link. That's why most people use
a cheap dos box running KA9Q as a intermediate router. It can
confine the packet storm to the ethernet by appropriate setting
of parameters.

Gary

--
Gary Coffman KE4ZV |"If 10% is good enough | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | for Jesus, it's good | uunet!rsiatl!ke4zv!gary
534 Shannon Way | enough for Uncle Sam."| emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -Ray Stevens |

469. WWV clock wanted

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-02 20:31:26 UTC
From: darrell@cse.ucsc.edu
Message-ID: <28koeu$jql@darkstar.UCSC.EDU>
Source record: 51408
Cross-posted to:
alt.radio.scanner,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.shortwave,rec.radio.scanner

At one time Heathkit (which I understand is demised, if not and you have their number send it tome) sold a "Most Accurate Clock" which was as WWV receiver with RS-232 output. I need to get something like that for a research project I am working on.

Radio Shack is no help (blank stares mostly), nothing in Edmund Scientific, etc... I'll drive over to Quement today to see if they have anything.

If you know where I could find such a thing, please drop me a note.

Thanks, DL

P.S. My apologies if I've posted to any inappropriate groups.

470. KPC-3 to HTX-202 cable wiring

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-02 21:29:23 UTC
From: Jeffrey Luszcz <jrl2@cornell.edu>
Message-ID: <28krrjINNpgb@newsstand.cit.cornell.edu>
Source record: 51410

Hello,
I just got a KPC-3 TNC. I need to make the cable between the
radio and the TNC. I own a htx-202 from radio shack. Does
anyone know the proper cabling between them? I have
2.2kOHM res and 3.9kOHM res and 0.1uf caps plus
mono 3/32 mono plus, 1/8stero and 1/8 mono plugs.
Can someone supply me with the proper circuit, tip/sleeve
data?
Thanks,
-Jeff Luszcz
N2TIQ
jrl2@cornell.edu

471. Re: FTP source for JNOS

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-02 21:45:06 UTC
From: Tomi.Manninen@hut.fi
Message-ID: <TOMI.MANNINEN.93Oct2234506@gamma.hut.fi>
Source record: 51409

In article <749500213.AA00139@afarm.uucp> Burt.Kaufman@f40.n382.z1.fidonet.org (Burt Kaufman) writes:

> >Can anybody point me to a site that has JNOS version 1.08c available for
> >anonymous FTP?

I checked few of the sites I know (wg7j.ece.orst.edu, mvangel.npt.nuwc.navy.mil, ftp.cs.tamu.edu, hydra.carleton.ca, col.hp.com) but the only one where I could find anything older than 1.09 was:

ftp.funet.fi: /pub/ham/packet/ka9q/jnos/jnos108c.exe

You probably should download the sources too (jnos108c.zip) as they contain the latest documentation (file readme.now). A rather old doc-file is wg7jdoc.zip in the same directory. Jnos is based on pa0gri nos so downloading pa0gri documentation wouldn't harm you: /pub/ham/packet/ka9q/pa0gri/nos_1229.man.2.0m

> >If possible, simple instructions on how to initiate the transfer would
> >be helpful as well.

Well, something like this:

```
------------------------------------------------------
Script started on Sat Oct 02 23:40:51 1993
23:40 gamma ~ % ftp ftp.funet.fi
Connected to ftp.funet.fi.
220-
220-Hello user at gamma.hut.fi,
220-
220-Welcome to the FUNET archive, Please login as `anonymous' with
220-your E-mail address as the password to access the archive.
220-See the README file for more information about this archive.
220-
220- All transfers are logged with your host name and whatever you entered
220- for the password. If you don't like this policy, disconnect now!
220-
220-nic.funet.fi FTP server (Version 4.1081 problems@nic.funet.fi) ready.
220-There are 6 (max 128) archive users in your class at the moment.
220-Local time is Sat Oct 2 23:41:00 1993 EET
220-
220-You can retrieve Ftp-archive top-level README before logon as well.
220
Name (ftp.funet.fi:tpmannin): anonymous
331 Guest login ok, give your E-mail address for password.
Password:
```

```
230-Guest `tomi.manninen@hut.fi' login ok.
230-
230- Finnish University and Research network FUNET
230- Archive FTP.FUNET.FI
230-
230-Most important file name suffixes are described at README.FILETYPES
230-Welcome, you are 6th archive user in your class (max 128).
230-There are 31 users in all classes (max 514)
230-Your data-transfer rate has no limitations.
230-
230-Local time is Sat Oct 2 23:41:21 1993 EET
230-
230-We have special access features, see file README
230- It was last updated Tue Sep 28 14:26:51 1993 - 4.4 days ago
230
Remote system type is UNIX.
Using binary mode to transfer files.
ftp> cd pub/ham/packet/ka9q/jnos
250 CWD command successful.
ftp> dir
200 PORT command successful.
150 Opening ASCII mode data connection for .
-rw-rw-r-- 1 oh3nwq ftp 328708 Aug 7 18:32 jn110x9.exe
-rw-rw-r-- 1 oh3nwq ftp 982612 Aug 7 18:32 jn110x9.zip
-rw-rw-r-- 1 mto ftp 265928 Mar 11 1993 jnos108c.exe
-rw-rw-r-- 1 mto ftp 1003829 Mar 11 1993 jnos108c.zip
-rw-rw-r-- 1 mto ftp 584401 Sep 2 05:39 jnos4099.exe
-rw-rw-r-- 1 mto ftp 167720 Mar 11 1993 new108c.zip
-rw-rw-r-- 1 mto ftp 46266 Mar 11 1993 wg7jdoc.zip
-rw-rw-r-- 1 mto ftp 228 Mar 11 1993 whats.new
226 Transfer complete.
ftp> bin
200 Type set to I.
ftp> get jnos108c.exe
200 PORT command successful.
150 Opening BINARY mode data connection for /pub/ham/packet/ka9q/jnos/jnos108c.exe (265928
bytes).
226 Transfer complete.
265928 bytes received in 3.7 seconds (71 Kbytes/s)
ftp> quit
221-Goodbye, and thank you for using the FUNET archive.
221 You transferred 260 KBytes during this session.
23:42 gamma ~ % exit
exit

script done on Sat Oct 02 23:42:21 1993
------------------------------------------------------------

Good luck! Don't forget the 'bin' command!!
--
---Tomi Manninen / Tomi.Manninen@hut.fi / OH2BNS @ OH2RBI.FIN.EU---
```

472. Re: WWV clock wanted

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-03 03:44:30 UTC
From: wa2ise@netcom.com
Message-ID: <wa2iseCEAyE6.JJ7@netcom.com>
Source record: 51411
Cross-posted to:
alt.radio.scanner,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.shortwave,rec.radio.scanner

In article <28koeu$jql@darkstar.UCSC.EDU> darrell@cse.ucsc.edu (Darrell Long) writes:
>At one time Heathkit (which I understand is demised, if not and you have
>their number send it tome) sold a "Most Accurate Clock" which was as WWV
>receiver with RS-232 output. I need to get something like that for a
>research project I am working on.

If you're using PC's and have a modem, there's a shareware program "Timeset"
that dials up the Naval Institute in Washington DC or NIST in Boulder, CO.
It connects and sets your PC's internal clock to match the real time.
Toll call, but it takes less than a minute to do the entire call.

473. SCDX 2188

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-03 11:31:43 UTC
From: Terry Stader - KA8SCP <p00489@psilink.com>
Message-ID: <scdx.2188@ampr.org>
Source record: 51421
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.info

```
::::::::::::::::::::::::::::::::::::
:: MediaScan ::
:: SWEDEN CALLING DXERS ::
:: from Radio Sweden ::
:: Number 2188--Oct. 5, 1993 ::
::::::::::::::::::::::::::::::::::::
```

Satellite, shortwave and other electronic media news from Radio Sweden.

This week's bulletin was written by George Wood.

Packet Radio BID SCDX2188

All times UTC unless otherwise noted.

SWEDISH MEDIA NEWS:

RADIO--The long-awaited auctioning off of frequencies for the country's first commercial radio stations began on September 22nd when the 10 new Stockholm channels were auctioned off, along with two more in the nearby city of Uppsala. 24 other frequenices in 12 cities in northern and central Sweden went on the block the following day.

As we've reported previously in the program, the only criteria was the size of the bid. Under the law passed by the center-right government, the licencing authorities were not allowed to judge applicants on the basis of format, or even if they thought they could afford their bids, as was the case when Britain's independent television franchises were re-licenced.

The highest power transmitter in Stockholm went to Radio Z, owned by the Kinnevik media empire, which also owns the satellite TV stations TV3 and TV1000; several cable-only film, music video, and shopping channels; and part of the terrestrial broadcaster TV4; as well as the country's second-largest cellular telephone network; and a number of magazines. Radio Z, which has been illegally relayed over community radio stations around Sweden for more than a year, promised to pay the state nearly 400,000 dollars a year for its licence.

Other Stockholm licences have gone to the French company NRJ, Megapol, operated by the Bonniers publishing conglomerate, and the women's station Radio Q.

Another went to Radio Rix, largely owned by a daily newspaper in Gothenburg, which altogether picked up licences in 9 communities. Radio Z is expected to work closely with the winning licensees in 4 towns outside of Stockholm,

while Megapol seems to have picked up licences in 3 cities outside of Stockholm. While the government legislation forbids networking, Radio Rix, Radio Z, and Megapol are expected to try to find ways around this limitation in order to challenge the non-commercial public service Swedish Broadcasting Corporation, which has four national networks.

One of the strangest results of the highest-bidder-takes-all auction system is that one station, Radio East, won both frequencies in the city of Norrkoping. They're promising to carry different formats on the two transmitters, one aimed at people under 40, the other at an older audience.

One of the licences in Uppsala, the seat of the Lutheran Church of Sweden, went to a controversial fundamentalist Christian sect.

Several of the new stations, including Radio Z and Radio Rix, can be expected to relay their progamming by satellite, probably the Swedish Tele-X (which also carries Radio Sweden).

The auction for frequencies in southern Sweden will be held later. The chairman of the local radio licencing authority, Anders Stening, has promised to find more frequency allocations by next June, because of the enormous interest, with at least five times as many applicants as there were available channels. (TT)

TELEVISION--The expansion of commercial television in Sweden is being discussed. There's currently one terrestrial commercial TV broadcaster here, TV4, although both TV3 and TV5 Nordic are available on cable and satellite. Recently Minister of Culture Birgit Friggebo repeated a suggestion that an additional terrestrial commercial broadcaster be licenced. According to Swedish Television news, the media spokesman for the opposition Social Democrats, Ake Gustavsson, has responded by proposing the inclusion of commercials in one of the two public service TV channels. (TT)

The suggestion is surprising, since it goes against decades of party ideology, although it would not be the first time in recent years the Social Democrats have turned away from long-held policies.

EUROPEAN MEDIA NEWS:

SUPER CHANNEL--The American TV network NBC has announced it is buying control of Super Channel, which will no doubt make a lot of European viewers happy. Super Channel has carried an unfocused mix of music videos, B movies, and news programs. NBC will be cutting back on the videos, and adding such programs as the "Today Show", the "NBC Nightly News", "The Tonight Show", and other news programs from NBC and its financial channel CNBC. NBC and Credit Lyonnais will hold a 75 percent
interest, while Richard Branson, founder of Virgin Atlantic airlines and the Virgin 1215 radio station, will continue to own the rest. (Reuters)

FRANCE VS ????--France's Higher Broadcasting Council has banned cable networks from carrying Turner Broadcasting's new Astra relays of the Cartoon Network and TNT. Apparently dubbing Yogi Bear into French is regarded as cultural imperialism...the official reason is that the Turner channels are

not in conformity with European regulations, that is, the non-obligatory and generally ignored EC recommendation that broadcasters carry a majority of European-produced programming. (BBC Monitoring)

Ted Turner is entitled to lodge an appeal with French authorities, although, his last tussle with the French legal system was when French cable operators successfully demanded that they should not have to pay to carry CNN since it was free to satellite dish owners.

There are many other channels in Europe which do not meet the EC quota which the French authorities are not trying to close down. Perhaps TNT's only crime is transmitting in French without being a part of the Canal Plus subscription network, which is partly owned by the French state. ("Skyguide")

MTV--Ironically, after MTV signed a lease for a channel on the Eutelsat II-F1 satellite recently, the executive vice president of France Telecom, Jean-Yves Gouiffes, was full of praise for the American music video channel, which many would consider a bigger threat to European culture than Yogi Bear. The French official remarked that MTV "has an enviable reputation throughout Europe as a forerunner in youth entertainment." ("Satnews")

MTV is taking the Eutelsat transponder to reach parts of Eastern Europe not covered by Astra. The channel recently leased a transponder on Norway's Thor satellite, in an attempt to reach Scandinavia. That means that MTV can continue to reach southern Europe using its Astra transponder 22, while using its other Astra transponder, 15, which has a good signal in northern Europe, to carry its VH-1 service, which is aimed at a somewhat older audience.

VH-1 may launch in Europe as early as February next year. At the same time MTV could begin encrypting its Astra signals, both as part of Sky's Multi-Channels package, and as part of a European Multi-Channels package. The new Eutelsat transponder will also be encrypted, using digital compression to provide room for several channels. ("Skyguide" and "Satnews")

FRANCE AND EUROSPORT--Eurosport has ceased providing a French audio soundtrack on its Astra and Eutelsat service. Viewers wishing to watch in French will need to subscribe to the Canal Plus package to receive "TV Sport", the French version of Eurosport. ("Skyguide")

RADIO FRANCE--France Info, France Inter, and Radio Victor are now relayed on the TV5 Europe transponder on Eutelsat II-F1, on 7.02, 7.20, and 7.38 MHz. (BBC Monitoring)

Radio France International is supposed to be broadcasting to Europe on Eutelsat II-F4. (AFP via BBC Monitoring) But monitoring checks have not revealed a relay of RFI. (BBC Monitoring) AFP quotes something called "World Radio". Could they mean the World Radio Network, which besides Astra, uses the MBC transponder on Eutelsat II-F1?

CHINESE ASTRA--China News Europe will launch on Astra in the near future. It currently broadcasts three hours a night on Super Channel's Eutelsat transponder. The channel will continue the same broadcast hours and times, and will share an Astra transponder with a UK Astra channel - possibly The

Family Channel or UK Living.

The channel will will also change its name to "Chinese News and Entertainment" at the same time as the launch. ("Skyguide")

RED HOT TV--Test transmissions from Red Hot Television (formerly Red Hot Dutch) have been noted on Eutelsat II-F3, with the promise of a full service in September. The first 'full broadcast' was of a bored-looking woman trying to repeatedly orally seduce a banana while encouraging tired viewers to subscribe to the service. ("Satnews")

GREECE--ERT has announced the establishment of a satellite channel called ERT International. (BBC Monitoring) As it is to broadcast to Europe, North Africa, and the Middle East, it will probably use Eutelsat.

PORTUGAL--RTP International has switched from Eutelsat II-F3 to Eutelsat II-F2, where it has joined other Latin broadcasters such as Italy's RAI, Vatican TV, and Spain's TVE. RTP is using the transponder on 11.654 GHz. (BBC Monitoring)

AFRICAN MEDIA NEWS:

ALGERIA--The Algerian Ministry of Communications has decided that its project to set up a second TV channel via satellite was premature. The project has been postponed. (BBC Monitoring)

EGYPT--Information Minister Safwat al-Sharif has announced that the Egyptian Satellite Channel will launch broadcasts in English and French in October. (BBC Monitoring) The ESC broadcasts on Eutelsat II-F3 on 11.178 GHz.

AMERICAN MEDIA NEWS:

MTV LATINO--MTV has started its new MTV Latino service to Spanish-speaking America from Miami. Initially MTV Latino is reaching 1.9 million homes in 10 Latin American countries and some parts of the United States, but hopes to eventually reach 3 to 5 million homes. MTV Latino is using the DigiCipher digital compression system on the Satcom C3 satellite, possibly on transponder 19. Viacom, which owns MTV, is considering making an analog version of MTV Latino available to home dish subscribers. MTV hopes its sister channels, VH-1 and Nickelodeon, will follow into Latin America. ("New York Times" and "Satellite TV Week")

ESPN2--Another new channel which has just started is ESPN 2, a faster-paced version of the sport channel aimed at the 18 to 34 year old MTV audience. Like the original ESPN, the second channel is on the Galaxy 5 satellite, and is still in the clear on transponder 14. (AP and "San Francisco Chronicle")

CABLE--In the United States, there's controversy over the new cable law that went into effect on September 1st. The law was supposed to lower consumers' bills, but complaints have come from across the country about cable operators taking advantage of the new regulations to raise rates instead.

The chairman of the Federal Communiations Commmission, James Quello, defended the regulations implementing the new law before a House of Representative

committee recently. 130 House members sent a letter to the agency two weeks ago urging the FCC to re-examine its regulations which, they say, "frustrated Congress's intent to make rates reasonable.

Cable operators have also used the provision of the new law requring them to include local broadcasters, to drop the C-SPAN channel, which broadcasts from the American Congress, which passed the law. The operators claim they don't have enough bandwidth to carry C-SPAN if they are obliged to also carry all local over-the-air stations on their networks.

The American Supreme Court has agreed to decide whether the provisions of the cable law requiring that cable systems devote one third of their channels to local broadcasters is constitutional. (Reuters, AP, "Satnews")

FOX--Fox Inc. says that it will formally launch its long planned basic cable network on March 1, 1994, and it has already signed agreements with one-third of US cable networks for its distribution. The network, known as FX, will be a general entertainment network. ("Satnews")

NBC--The NBC Network has acquired the entire capacity of the Ku-band SBS-4 satellite. NBC will use the satellite on an occasional-use basis until September, 1994, when the network will have full-time access. This marks the first time a broadcast network has arranged to be the sole user of a satellite.

SBS-4 was launched in 1984 and carries ten 20-watt Ku-band transponders at 77 degrees west longitude. Hughes operates the satellite in an inclined geosynchronous orbit, enabling it to use less fuel with north-south station keeping. SBS-4 is expected to provide service until 2004.

NBC has also signed an agreement with GE Americom Communications for Ku-band satellite capacity aboard its GE-1 satellite. Capacity will be used from 1996. Like the SBS-4 transponders, NBC will use GE-1 transponders for feeds and programme distribution.

Elsewhere NBC has increased its interest in American Television Network, a partnership that produces health and medical programmes aimed at consumers and physicians. NBC plans to transform the network into a 24-hour cable channel at a later stage. ("Satellite TV Week" and "Skynews")

NEW TURNER NETWORK--Turner Classic Movies will debut on April 14, 1994, the exact centennial anniversary of the first public movie showing in New York City. It will air hundreds of movies from the 1930's to the 1980's. ("Satellite TV Week")

PARAMOUNT--Updating the report last time, the home shopping network QVC has offered a higher bid than Viacom to buy the entertainment giant Paramount. (Curiously, both QVC and Viacom are valued less than Paramount.) There is scepticism if QVC can actually raise the money, and Viacom is both suing its rival (claiming QVC is trying to monopolize the cable television industry through its contacts with the country's largest cable company TCI), and

trying to find more funds. Viacom has brought in the video rental company Blockbuster Video on the deal. (Reuters and "New York Times")

SHOPPING NETWORKS--ValueVision International Inc., a TV home shopping network, has signed up for a C-band transponder on Hughes Communications' next-generation Galaxy 1-R satellite, set to be located at 133 degrees west longitude. ("Satnews")

Time Warner and Spiegel Inc. have announced they will launch two cable television home shopping channels next year, including an interactive "video shopping mall". The joint venture makrs the first attempt by either company to develop a home shopping business. The channels will feature clothes, accessories, and home furnishing sfrom Spiegel's catalog and from its Eddie Bauer and other speciality divisions.

The interactive channel will make its debut next April on an experimental cable network Time Warner is building in Orlanda, Florida. "The interactive channel will, in effect, be a video shopping mall," say the two companies. "Cable customers will be able to enter any catalog 'store' at any time, view a variety of merchandise in full motion video and make purchases on demand."

A more conventional home shopping channel with a working title of "The Catalog Channel" will start in the first quarter of next year on Time Warner's cable systems, the second largest in the US, with 7.1 million subscribers in 36 states. The channel will later be offered to other cable operators. (AP)

WIRELESS SERVICES--The Federal Communications Commission in the United States has reallocated 160 MHz of spectrum fo companies to create a series of new wireless devices that the industry says could make pocket telephones so inexpensive that half the American population is expected to carry them by the year 2000. Proposed services also include palm-sized computers, and laptops that receive video pictures.

In each local area 120 MHz will be divided into seven blocks that will be licenced to the highest bidders at an auction sometime next year. The remaining 40 MHz will be available for unlicenced, non-commercial services, such as the internal communications of a university.

The new bandwidth is 4 times the size of the spectrum allocated for existing cellular phones. The FCC is taking the space away from users like utilities, railroads, and pipeline companies, who communicate from fixed trasmitters and could operate at higher frequencies. (AP and "San Francisco Chronicle")

ASIAN-PACIFIC MEDIA NEWS:

AUSTRALIAN TV FARCE--The biggest farce arguably in broadcasting history is still going on in Australia with the pay television licence awards.

Ever since the Australian government first announced that four channels could be broadcast by satellite aboard an Optus satellite, the whole affair has been dogged by errors, omissions and plain stupidity. This time two private companies with the same owners, and related

to an unsuccessful previous bidder, have been granted the licences to broadcast.

David Beddall, Australia's beleaguered communications minister, said that UCOM Australia Pty Limited and New World Telecommunications Limited have stumped up enough cash to pay for their non-refundable deposits, and hence are eligible for the licences.

Only a few weeks ago two companies failed to come up with money pledged for the licences. Ucom Pty Limited and Hi Vision Limited paid significantly over the odds against over 50 rivals including seasoned veterans such as News Corp. to secure the licences.

A third licence has been reserved for the state-owned broadcasting company ABC. ("Satnews")

INDIA--The federal minister for information and broadcasting has announced that the state TV Doordarshan will increase its operations to 21 channels. (PTI via BBC Monitoring) It was only on August 15th that Doordarshan added 6 new satellite channels to its existing 2.

ASIASAT--BT has taken an option on five AsiaSat 2 36MHz C-band transponders for the satellite set to commence operation in March 1995. BT plans to use the satellites to expand its international broadcasting business. ("Satnews")

STAR-TV--The Hong Kong-based STAR-TV satellite network may lose its pan-Asian character in the midst of intense competition for hefty shares of the television market in specific Asian countries.

Media analysts predict that rather than offering a completely new perspective on Asian viewing that cuts across the region's cultural boundaries, STAR-TV will vie directly with local broadcasters to woo the bulk of viewers.

Hints of a new, sharpened focus for STAR came last month when media tycoon Rupert Murdoch spoke of reorganising his newly-acquired network into at least two companies that would specifically target India and China, including Taiwan and Hong Kong -- and possibly a third for Indonesia.

"I see STAR-TV being split into at least two companies: one for India and one for China. They are totally different cultures," media reports quote Murdoch as saying last month, just weeks after he took control of the network from founder Li Ka Shing.

Analysts say Murdoch's remarks indicate his intention to meet competition from emerging satellite markets head on. Once the biggest markets are secured, advertising and the survival of the system will be locked in place, they add.

Murdoch's take-over of the STAR occurred at a time when broadcasting markets in Asian countries were changing rapidly, partly in response to STAR itself and also to more planned satellites that will have footprints covering the continent.

Begun in 1990, STAR is the acknowledged pioneer in Asian regional broadcasting.

"STAR-TV achieved a measure of success in Asia at a time when the technological means for competing with it was not there," notes one media analyst here who declined to be named. "For STAR to survive, even if Murdoch had not taken over -- it would have to change."

Indeed, competition in individual markets is heating up. India's Doordarshan launched five terrestial channels last month. And with India regarded as a key market for attracting audiences and advertising, other satellite and cable channels are opening up there.

STAR is also after the Taiwanese market, where the population has considerable disposable income. But earlier this month, the government said six new channels would be starting up soon to join the three terrestial channels already controlled by Taipei, the armed forces and the provincial governments.

Meanwhile, the Hong Kong broadcaster TVB, which had a planned tie-up bid with Murdoch that ran afoul of the colony's foreign media ownership rules, this week launched a special Mandarin language service for Taiwan, and plans to add three more channels there.

But the broadcasters' dream -- and nightmare --remains China, where the population of 1.2 billion people have left merchants of all kinds drooling.

Subscription television services are already opening up in that country, where the thirst for information from the outside has made it a major market. Comments Ronnie Liu, Disney's Hong Kong-based China director: "Mainlanders are like sponges. They will lap up anything. They are not yet as sophisticated, as discerning as consumers in Hong Kong or Taiwan."

But some industry analysts have already begun lamenting the loss of STAR's pan-Asian orientation in favour of the planned audience-specific programming.

They point out that one of the major successes of Music Television (MTV) Asia was the launch of new popstars whose appeal surmounted national boundaries. Taiwanese and Thai singers became popular in India. Indian rock groups made it in Hong Kong and the Middle East.

But even pre-Murdoch STAR-TV was beginning to realise that programmes had to be more specifically geared.

More targetted programmes were already being aired, such as the Indian Business Report, which relied on time zone differences for reaching its target audience.

The British Broadcasting Co.'s (BBC) World Service Television News, which is carried by STAR, was also skewing its reports toward an Indian audience, where it has its largest, most loyal following.

But Sarah Rochin, managing director of the brokerage firm CEA Pacific Rim that specialises in broadcasting told the South China Morning Post recently: "STAR-TV's programming is not the best yet because it does not address

viewers' needs and aspirations. A division of the company into three regions could do that."

Still, while many of STAR's staff members themselves admit they are worried about the changes, some say they are more fearful about reports that Murdoch may manage the network from London, particularly news and sports.

"Asia moves so fast," says one disgruntled STAR executive, "It will be difficult to spot emerging trends and react swiftly and creatively from London."

Some analysts say the move to have the network run by non-Asians a whole continent away may have more impact on STAR's 'Asian character' than the proposed divisions.

Says one market analyst there: "Television is not about management techniques, where perhaps Murdoch's people may have the edge, but about keeping the pulse on the audience and responding to cultural trends." (Yojana Sharma, IPS)

JAPAN--Three television stations have started new satellite channels, bringing the number of Japanese satellite channels to 9. The three are SVN Space Vision (entertainment and sports), Let's Try Life Design (hobby and cultural programs), and Asahi Newstar (news and documentaries). At present there are only 58,000 satellite subscriptions in Japan, far short of the targeted 200,000. One reason for the sluggish demand is the high cost of equipment. Currently, antennas and receivers cost around 200,000 yen. New receivers, cheaper by tens of thousands of yen, will be marketed later this year. (Kyodo news agency via BBC Monitoring)

SHORTWAVE NEWS:

CROATIA--Croatian Radio Studio Zagreb has been heard on a new frequency of 13640 kHz, in parallel with 13830, 9830, and 5920 kHz. Transmissions on these frequencies appear to be 24 hours a day, with relays of Croatian Radio's domestic service. (BBC Monitoring)

LITHUANIA--Two months ago we reported that the private station Radiocentras was going against the trend of modern technology and broadcasting in morse code on 9400 kHz. BBC Monitoring now reports that Radiocentras has switched to relaying voice, apparently its domestic service in Lithuanian, along with short announcements in English and German. The transmissions on 9400 kHz are in lower side band. (BBC Monitoring)

Radio Vilnius is transmitting to North America on the new frequency of 7335 kHz weekdays at 23:00 hrs. (Cees van Oudheusden in BDXA "DX Hotline" via Kauto Huopio)

MOLDOVA--Radio Moldova International has transmissions in French at 12:00-12:25 hrs on 17800 kHz and at 18:00-18:25 on 11950 kHz. (Cees van Oudheusden in BDXA "DX Hotline" via Kauto Huopio)

RUSSIA--Rukhi Meroc (Spiritual Heritage), Moscow, is a station broadcasting in Arabic/Tatar at 15:00-16:00 hrs (Fri) on 1332, 4055, 7160, 11630, 12075,

and 17890 kHz. Broadcasts will be one hour later in winter. (BBC Monitoring)

Russia's Radio - Nostalgia (Russian: Radio Rossii - Nostalzhi), Moscow, is an association between Russia's Radio and the French commercial radio organisation, Nostalgie Internationale. They are transmitting in Russian at 04:00-16:00 and in French at 16:00-04:00 (relay of Radio Nostalgie Paris) on 963 kHz. (BBC Monitoring)

OFFSHORE BROADCASTERS--The Voice of Peace, which operates off the coast of Israel, closed down on October 1. With the signing of the peace agreement between Israel and the PLO, owner Abie Nathan believes the station is now obsolete. Speaking on the NPR "Weekend Edition" program Saturday, Abie Nathan said he had planned to scuttle the ship, but was instead persuaded by the Mayor of Tel Aviv to bring it to shore, where it is to be made into a beach museum. (National Public Radio and Martin Heffels on Internet News, via Kauto Huopio)

Sweden Calling DXers is the world's oldest radio program for shortwave listeners. Radio Sweden has presented this round-up of radio news, features, and interviews on Tuesdays since 1948.

Radio Sweden broadcasts in English:

To Europe:

17:15 hrs on 1179 and 6065 kHz
18:30 hrs and 21:30 hrs on 1179, 6065, and 9655 kHz
22:30 hrs on 1179 and 6065 kHz
23:30 hrs on 1179 kHz

To East Africa and the Middle East:

18:30 hrs on 15145 kHz

To Asia and the Pacific:

12:30 hrs on 15240, 17740, and 17865 kHz
23:30 hrs on 11910 kHz
01:30 hrs on 9695 and 11695 kHz

To North America:

13:30 and 14:30 hrs on 15240 and 17870 kHz
02:30 and 03:30 hrs on 9695 and 11650 kHz

To Latin America:

00:30 hrs on 9695 and 11650 kHz

The broadcasts at 17:15, 18:30, 21:30 (weekends only), and 22:30 hrs are relayed on satellite on Astra transponder 26 (Sky Movies Gold) audio 7.74 MHz and Tele-X on 12.207 GHz (TV4) audio 7.38 MHz.

Contributions can be sent to DX Editor George Wood by fax to +468-667-6283, from Internet, MCI Mail or CompuServe (to the CompuServe mailbox 70247,3516), through the FidoNet system to 2:201/697 or to SM0IIN at the packet radio BBS SM0ETV.

Reports can also be sent to:

Radio Sweden
S-105 10 Stockholm
Sweden

Contributions should be NEWS about electronic media--from shortwave to satellites--and not loggings of information already available from sources such as the "World Radio TV Handbook". Clubs and DX publications may reprint material as long as MediaScan/Sweden Calling DXers and the original contributor are acknowledged, with the exception of items from BBC Monitoring, which are copyright.

We welcome comments and suggestions about the electronic edition, Sweden Calling DXers, and our programs in general.

Thanks to this week's contributors Good Listening!

474. Looking for PCMICA radio

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-03 14:04:41 UTC
From: brad.shipp@chowda.sbs.com
Message-ID: <93100312185413@chowda.sbs.com>
Source record: 51416

-> From: Lok Liu <ll2c+@andrew.cmu.edu>
-> Newsgroups: rec.radio.amateur.digital.misc

-> components that I need. Does anyone know where I can find a PCMICA t
-> ways radio or fax/data modem that consumes very little power? If you

PCMCIA I assume. Fax/data modem is easy if you're talking about a
standard telephone modem. There are several on the market, including a
fairly nice one from MegaHertz. About $500 for the 14.4 modem.

The two way PCMCIA radio might be a little tougher, although I believe
Motorola makes a receive-only PCMCIA radio & modem designed to receive
pages via a laptop. In fact I believe CC:Mail now has an interface for
the modem.

475. KPC-3 and HTX-202

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-03 14:48:21 UTC
From: 76703.3035@CompuServe.COM
Message-ID: <931003144821_76703.3035_CHN36-1@CompuServe.COM>
Source record: 51412

Jeff, N2TIQ, asks:

>> I just got a KPC-3 TNC. I need to make the cable between the radio
>> and the TNC. I own a htx-202 from radio shack. Does anyone know the
>> proper cabling between them? I have 2.2kOHM res and 3.9kOHM res and 0.1uf
>> caps plus mono 3/32 mono plus, 1/8stero and 1/8 mono plugs. Can someone
>> supply me with the proper circuit, tip/sleeve data?

The HTX-202 is the same as an ICOM IC-2AT with regard to wiring up a TNC. I don't have the diagram handy, but I do know you can purchase a cable already wired for a nominal price. MFJ makes them for several configurations, not limited just to MFJ-made TNCs. You can get them through HRO (which is where I got mine) or through anyone who carries MFJ products, or direct from MFJ.

-- //Steve// [KB6OJS]
03-Oct-93, 10:49:32 ET

/--------------------------------+--\
Steve Silverwood	CompuServe: 76703,3035
Computer Associates	GEnie: S.SILVERWOOD
One Computer Associates Plaza	Internet: 76703.3035@compuserve.com
Islandia, NY 11788-7000	FAX: (516)DIAL-FAX
	Voice: (516)CALL-CAI
\--------------------------------+--/

476. Re: Looking for PCMICA radio

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-03 15:54:44 UTC
From: decastro@netcom.com
Message-ID: <decastroCEBw79.849@netcom.com>
Source record: 51413

Lok Liu <ll2c+@andrew.cmu.edu> writes:

>I hope this is the right place to post this message. Right now I am
>working on a research project. But I run into to trouble in finding the
>components that I need. Does anyone know where I can find a PCMICA two
>ways radio or fax/data modem that consumes very little power? If you
>do, can you tell me where I can find the specification on those parts.

I don't know of any 2-way radios, but there are MANY data/fax modems
in PCMCIA format. BBrand names are Megahetz, Xircom, Practical Peripherals.

No PCMCIA I/O device consumes very little power. They all seem to be
battery exercisers <g>
--
==========
decastro@netcom.com

Richard A. De Castro

477. Re: Soundblaster (tm) for multi-mode digital communications

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-03 16:11:39 UTC
From: david@djwhome.demon.co.uk
Message-ID: <749689899snx@djwhome.demon.co.uk>
Source record: 51420

In article <1993Sep29.184626.18738@brtph560.bnr.ca> cnc23a@b4pph13e.bnr.ca (Ken Edwards) writes:

>I recently saw an advertisement in QST of a software program that will
>use the Soundblaster(tm) for SSTV decoding. I know of a public domain program
>that uses the Soundblaster(tm) for DTMF decode. The VOICEBLASTER (tm) product
>will do voice recognition.

There is also a program (FFTMORSE in the HAM directory on Simtel (RIP) mirrors) which will decode morse code. (One of my unfinished projects is an enhanced GCC compiled 32 bit version.) The original has problems with SB Pros (I could post my fix for it on the condition that I get feedback on whether it works - it reportedly does not always do so).

>This leads to a simple question : "Can the Soundblaster (tm) be programmed to
>do all the 1200, 2400, 9600, afsk, psk, etc. TNC work, (Color) SSTV, WEFAX,
>RTTY, CW, AMTOR, FAX, PACTOR, CCTSS, DTMF, etc. etc. work that a multi-mode
>digital controller does ?"

The three critical parameters are sampling speed, quantisaton noise and processor power. The SB-Pro can sample fast enough for any of these, and the Pro 16 should have good enough quantisation. The processing power is a function of your CPU (the original FFTMORSE runs on 16 bit processors, but I would advise 32 bit ones). I am not familiar enough with DSP algorithms to be sure about the power required (although the FFTMORSE program does more processing than is strictly needed and runs on machines less powerful than my 25MHz 386 SX).

Telephones use 8 bit quantisation (7 and a bit in the US), but they use a logarithmic transfer function. I am not sure whether this is better or worse for digital modes (I have a suspicion that the SB's linear function may be better).

Telephones use 8kHz sampling rates, which should be enough for lower speeds (up to 1200). The higher speed modes (I only have details for 9600) are not the same as those used over a telephone and need a faster sampling rate. The theoretical ideal for the two state codes used is the bit rate, but a more realistic rate would be a little over twice the bit rate, thus the 22kHz sampling rate on the SB might just be enough. I suspect that an even faster rate would make the software simpler; could a DSP expert please comment.

Incidentally, CW is probably more difficult than the lower speed digital modes. The problem is that, when the signal is fading and there may be long pauses, it is difficult to choose a threshold level to distinguish between key up and key down. The low speed modes provide a continuous audio signal. The higher

speed modes are normally used over clean channels.
--
David Woolley, London, England david@djwhome.demon.co.uk

478. Memphis Hamfest & Delta Division Convention

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-03 16:20:41 UTC
From: kagoos@msuvx2.memst.edu
Message-ID: <1993Oct3.112041.10480@msuvx2>
Source record: 51414

MEMFEST 93
October 9 - 10

The 34th Annual Greater Memphis Hamfest and Delta Division Convention will be held October 9th and 10th.

New Location: Shelby Show Place Arena
105 Germantown Road South
(901)756-7433

Hours: Saturday 9:00 am - 4:00 pm
Sunday 9:00 am - 2:00 pm

Admission: $5.00 per person (under 12 people)

Talk-in: Live 146.28/88 444.00/449.00 1272.00/1292.00
Automated 146.22/82 224.42/222.82

Special Guest: George Wilson, W4OYI; Dave Sumner K1ZZ; Larry Price W4RA; Joel Harrison, WB5IGF; Jay Maybe. NU0X

Forums: ARRL, MARS, ARES, RACES, VHF/UHF, YLRL, Antennas, Direction Finding, Packet and more.

Prizes: Among other prizes a Icom Dual Band Handheld will be given away every hour on the hour.

Hope to see you all in Memphis. If you need more info send me a msg.

Suresh N9GSA

___ ___ _____ ___ ___ Suresh Kagoo EE Dept , Memphis State University
| \/ | / ____\ | | | | Engineering 211 | Domain: KAGOOS@MEMSTVX1.MEMST.EDU
| \ / | ____ \ | |_| | Memphis, TN 38152| AMPR : n9gsa@gate.n9gsa.ampr.org
|_|\/|_| _____/ _____/ Ph: (901) 678-3867| AX.25 : N9GSA@W4BS.#WESTN.TN.USA

479. AA4RE BBS beta version 2.1K

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-03 17:29:11 UTC
From: enge@almaden.ibm.com
Message-ID: <19931003.102913.962@almaden.ibm.com>
Source record: 51415

AA4RE Beta Version 2.1K is now available. You can FTP it from kilroy.jpl.nasa.gov. It will be uploaded to the WA6RDH LLBBS later today.

Roy, AA4RE

480. jnos109, node arp/route suggestions, please

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-03 19:15:56 UTC
From: znha@ve3ppe.isis.org
Message-ID: <CEC5IK.EI5@ve3ppe.isis.org>
Source record: 51423

I'm seeking net.wisdom, particularly in the area of jnos configuration.

The setup consists of jnos109n on a pc-at, mfj tnc and radio. Boots up fine, all that. Now I need to work through the local TheNet X1H node to work the local MSYS bbs (see .sig below). I can "c iface" "node" and then connect on to the bbs. I can "netrom connect" bbs and that works too. So af/if/rf issues are out. Virtual circuit works fine, netrom works fine.

The issue is what to put in the arp and route table. Without them (there's little in them now except broadcast and the occasional default) tcp layer programs don't work (telnet, ftp, finger, snmp).

If I put the default route as myself, and the arp bbs ax25 iface, I can trace jnos putting out requests into the air. But, of course the bbs can't hear me--I need to go through the node.

If I put the default route as the node, and the arp node ax25 iface, I can see the node responding. (Not that it ever shows in the arp table...) But the node is merely giving me back it's address. (Too much time--several hours--fiddling with this, sri if not percisely correct on sequence and events. Bottom line is tcp never worked.)

JNOS (or even X1H, for that matter) suggestions, please.

Thanks, Gord.
znha@ve3ppe.isis.org (internet) ve3ppe@ve3osq.#eon.ca.na (packet)

481. Re: FTP source for JNOS

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-03 23:16:06 UTC
From: "Seth M. Dworken" <p00123@psilink.com>
Message-ID: <2958764834.1.p00123@psilink.com>
Source record: 51417

>DATE: Thu, 30 Sep 1993 18:26:04 -0600
>FROM: Burt Kaufman <Burt.Kaufman@f40.n382.z1.fidonet.org>
>
> -=> Quoting "seth M. Dworken" to All <=-
>
> >Can anybody point me to a site that has JNOS version 1.08c available for
> >anonymous FTP?
>
> "MD> Go right to the "source" -- the host is wg7j.ece.orst.edu -- and I
> "MD> believe the directory names are the version numbers. You'll have to
> "MD> check that...
>
> >If possible, simple instructions on how to initiate the transfer would
> >be helpful as well.
>
> "MD> Try the "man ftp" command if you are on a Unix system to read the FTP
> "MD> manual pages.
>
>The reason I asked, is, of course, that I CAN'T do that. If I had
>regular net access, I wouldn't be trying to get TCP/IP going over
>Packet. I am attempting to route info/software via packet to/from
>the Internet. Don't tell me I have to have access to get the files
>so I can get access! I do have a couple of friends that can download
>files, IF given precisely detailed instructions.
>
>Burt N5SYY
>
>... "Practicing the martial arts assures a long life." - Bruce Lee
>___ Blue Wave/QWK v2.12
>

=======

Hey Bub, I'm not a mind reader. You asked for an anonymous FTP site.
I thought I'd try to be helpful and I gave you that information. You
didn't say what your situation was, what kind of computer you're using,
what kind of access you had, etc.

So since you don't want me to tell you this or that or the other thing,
I won't waste my time.

You conviently truncated my reply to imply that I did not include
the "simple instructions" you asked for. Here is the text that was
included in my original reply, which you will note are simple
instructions on how to use FTP:

=========

>If possible, simple instructions on how to initiate the transfer would
>be helpful as well.

ftp wg7j.ece.orst.edu
will open an FTP connection to the specified host

you can issue a "?" to see the list of commands or "?,<command>" with
no quotes or brackets to see a one-line description of <command>.

Use "cd" to change directories on the remote, "ls" or "dir"
to get directory listings.

This one is a MUST for retrieving anything but simple text files --
"binary" which sets binary mode (ascii is the default) and must be used
for any compressed files, including .zip files.

To actually retrieve the file, use the "get" command:
get xyz.zip
assuming you have already set the curent directory. Or, use the full
path.

Then use exit or quit (I forget which) to close the connection and
leave FTP.

===========

Looks to me like you should be all set. But go ahead and butt you head
against the wall for a while more, maybe you'll learn how to read or
better yet learn some manners.

BTW, putting some of what is on the Internet on the air waves could be
illegal.

And I noticed you didn't say thanks for the reply. Don't bother.

482. PG/PB Archive Site?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-04 03:59:26 UTC
From: tking@oes.CA.GOV
Message-ID: <9310040405.AA16704@nic.teale.ca.gov>
Source record: 51418

Does anybody know where I could obtain copies of thisoftware for using the Microsats?

Thanks Tom KA6SOX

tking@oes.ca.gov

483. Re: WWV clock wanted

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-04 05:00:21 UTC
From: stanley@skyking.oce.orst.edu
Message-ID: <28oal5$kpi@gaia.ucs.orst.edu>
Source record: 51419
Cross-posted to:
alt.radio.scanner,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.shortwave,rec.radio.scanner

In article <28koeu$jql@darkstar.ucsc.edu>,
Darrell Long <darrell@cse.ucsc.edu> wrote:
>At one time Heathkit (which I understand is demised, if not and you have
>their number send it tome) sold a "Most Accurate Clock" which was as WWV
>receiver with RS-232 output. I need to get something like that for a
>research project I am working on.
>
>Radio Shack is no help (blank stares mostly), nothing in Edmund Scientific,
>etc... I'll drive over to Quement today to see if they have anything.
>
>If you know where I could find such a thing, please drop me a note.

Odetics, Precision Time Division, Anaheim CA. Model UTS-10.

484. AX.25 protocol with Linux?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-04 12:41:13 UTC
From: riku@juha.fi
Message-ID: <28p5l9$1af@juha.fi>
Source record: 51422

Does there exist any support for AX.25 packet radio protocol in Linux?

(Linux is freely-available x86 (x >= 3) *nix - lookalike.)

Is this support in the form of add-on or what?

If there is support for AX.25, what is the needed hardware?

Anything else I should know?

(I know that it is possible to use linux machine with standard TNC and serial
line but I am searching something better, eg. how to connect multiple users
thru one serial port.)

--
- Riku "the bit" Kalinen, Suomen Tietoverkkopalvelu Oy
- Ham: OH2LWO (>= 50MHz)
- X.400: G=Riku;S=Kalinen;O=juha;P=juha;A=mailnet;C=fi
- "Always choose a bigger enemy, because it's easier to hit." -Terry Pratchett

485. Re: KPC-3 to HTX-202 cable wiring

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-04 12:44:27 UTC
From: cmwdr01@nt.com
Message-ID: <cmwdr01.17.0007BDE2@nt.com>
Source record: 51439

> I just got a KPC-3 TNC. I need to make the cable between the
>radio and the TNC. I own a htx-202 from radio shack. Does
>anyone know the proper cabling between them? I have
>2.2kOHM res and 3.9kOHM res and 0.1uf caps plus
>mono 3/32 mono plus, 1/8stero and 1/8 mono plugs.
>Can someone supply me with the proper circuit, tip/sleeve
>data?
> Thanks,
> -Jeff Luszcz
> N2TIQ
> jrl2@cornell.edu

I used the wiring diagram from the KPC-3 manual for an Icom 2at using the
KPC-3's internal cap and resistor for my HTX-202.
73 - Dave.

==========
Dave Redfearn, SR PC LAN Analyst Northern Telecom RTP, NC.
ph.(919) 992-3925 email: cmwdr01@nt.com qrl? de N4ELM/qrp

All opinions are my own and do not necessarily reflect the views of
my employer, co-workers or any other person, living or dead.

486. New DX-cluster software project, asking volunteers to help.

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-04 13:07:07 UTC
From: riku@juha.fi
Message-ID: <28p75r$1ie@juha.fi>
Source record: 51425
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.misc

Hello netlanders,

I am setting up a project to create {newer,cooler,better} DX-cluster software.

So far I have got the following ideas about this project:

1) MSDOS is hardly optimal operating system to put this kind of multiuser
system on. I think that using something like Linux or NetBSD would
lead to better results. Possibly POSIX would be suitable software base
to build on.

2) The new system should be compatible with existing ones. Minimum
requirement would be that the cluster could talk with existing ones
using the same protocol. User-visible changes should not be too big.

3) We (OH-land) use DX-clusters also in amateur radio volunteer rescue
services (like RACES in US), and there are certain things that
existing software can not do, therefore the need to start this kind of
project in first place.

4) The software should be non-commercial (I think that GPL would be
excellent lisence to distribute the software).

5) The software should be built on top of widely-used tools (like C,
Perl, others..), and it should be well-documented, easily extensible
and modifiable.

6) Software distribution should be in source form.

What is needed right now is skilled manpower to think out and make
specifications for the new system.

If You think that You could give something to this project, please drop email
to riku.kalinen@juha.fi.

--
- Riku "the bit" Kalinen, Suomen Tietoverkkopalvelu Oy
- Ham: OH2LWO (>= 50MHz)
- X.400: G=Riku;S=Kalinen;O=juha;P=juha;A=mailnet;C=fi
- "Always choose a bigger enemy, because it's easier to hit." -Terry Pratchett

487. Re: jnos109, node arp/route suggestions, please

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-04 14:06:37 UTC
From: kf5mg@vnet.ibm.com
Message-ID: <CEDLv1.IEI@hawnews.watson.ibm.com>
Source record: 51426

In <CEC5IK.EI5@ve3ppe.isis.org>, znha@ve3ppe.isis.org (Gordon Dey) writes:
>I'm seeking net.wisdom, particularly in the area of jnos configuration.
>
>The setup consists of jnos109n on a pc-at, mfj tnc and radio. Boots up
>fine, all that. Now I need to work through the local TheNet X1H node to work
>the local MSYS bbs (see .sig below). I can "c iface" "node" and then
>connect on to the bbs. I can "netrom connect" bbs and that works too.
>So af/if/rf issues are out. Virtual circuit works fine, netrom works fine.

Two Items. Have you done anything with the AX25 Route command? We don't
have any netrom nodes around here, so I don't know if JNOS to MYSYS via Netrom
would work differently than JNOS to MYSYS via digi or not. But to use a
digi, you set up an AX25 ROUTE command that uses the digi in addition to
the Route commands. We don't set any arp commands and let the system take care
of that. The Route command doesn't have to know anything about the digi. The
AX25 Route command is the only thing that worries about the digi.
More importantly.... how come the X1H node is not running the IP router
code? If it is, you won't need to worry about NET/ROM at all. Just set up your
Route to the MYSYS box to go via the X1H IP node. If the X1H node is running
the IP code and has an address of 44.28.14.14 and the MYSYS node is using
44.28.14.21 and your TNC portname is called TCPIP, your route to the MYSYS
station would be
ROUTE ADD 44.28.14.21 TCPIP 44.28.14.14
or something like that. That's the way to go with X1H IP routers. You don't
need NET/ROM at all. We get along just fine without it. :)

73's de Jack - kf5mg
AX25net - kf5mg@kf5mg.#dfw.tx.usa.na - (817) 962-4409
Internet - kf5mg@kf5mg.ampr.org - 44.28.0.14
Worknet - kf5mg@vnet.ibm.com

488. Re: AX.25 protocol with Linux?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-04 14:11:12 UTC
From: kf5mg@vnet.ibm.com
Message-ID: <CEDM2o.MxA@hawnews.watson.ibm.com>
Source record: 51427

In <28p5l9$1af@juha.fi>, riku@juha.fi (Riku Kalinen) writes:
>Does there exist any support for AX.25 packet radio protocol in Linux?

Check out the NOS-BBS@HYDRA.CARLETON.CA mailing list. There's a guy there who's ported JNOS to Linux. It has multi user, AX.25 support along with the standard TCP/IP stuff. I haven't tried it out, but several people have. There's also something call WAMPES. I think that there's a Linux version for that too. Look for it on UCSD.EDU in the ham-radio TCP/IP directories.

73's de Jack - kf5mg
AX25net - kf5mg@kf5mg.#dfw.tx.usa.na - (817) 962-4409
Internet - kf5mg@kf5mg.ampr.org - 44.28.0.14
Worknet - kf5mg@vnet.ibm.com

489. Re: DVR4-10's @ 450mhz

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-04 14:24:07 UTC
From: jra@lawdept.daytonoh.ncr.com
Message-ID: <jra.8.00096737@lawdept.daytonoh.ncr.com>
Source record: 51424

In article <9310020032.AA07674@ingersoll.com> dewaldz@ingersoll.COM (Dave Ewaldz) writes:

>We are in the process of setting up a local 9600 backbone link on 70cm here,
>and one of the participants has purchased a Kantronics D4-10 radio for his end.
>The link is on 440.050 mhz. The Kantronics manual leads one to believe these
>radios can't go this high in frequency. Anyone have any luck with these rascals
>above 440mhz?
>Any feedback would be appreciated.

I haven't tried moving a D4 up to 450, but I don't think it would be a problem
-- the RF circuits are pretty wide. We're running D4s at 420.xx and 430.xx,
and find that very little retuning is required to move 10MHz -- in fact, a
radio tuned for 430 will work pretty well at 420 with no retuning at all
(except for tweaking the VCO pots per the manual).

John

490. Re: DVR4-10's @ 450mhz

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-04 14:54:24 UTC
From: andyw@aspen32.cray.com
Message-ID: <1993Oct4.095424.1596@hemlock.cray.com>
Source record: 51429

In article <9310020032.AA07674@ingersoll.com>, dewaldz@ingersoll.COM (Dave Ewaldz) writes:
> We are in the process of setting up a local 9600 backbone link on 70cm here,
> and one of the participants has purchased a Kantronics D4-10 radio for his end.
> The link is on 440.050 mhz. The Kantronics manual leads one to believe these
> radios can't go this high in frequency. Anyone have any luck with these rascals
> above 440mhz?

Some are running on 449 in the Twin Cities, apart from the
usual drifting, and maybe some deafness, they work.
--
andyw N0REN/G1XRL

andyw@aspen.cray.com Andy Warner, Cray Research, Inc. (612) 683-5835

491. Baycom Modem Problem

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-04 15:46:16 UTC
From: drs@ccd.harris.com
Message-ID: <1993Oct4.154616.9763@ccd.harris.com>
Source record: 51430

I have a Baycom modem that I built myself and have successfully use on a couple of local BBS fine. No problems noticed. When I try to connect to the local MARS BBS I cannot successfully connect. It appears as though I send a connect request, the other station sees it and responds with a request for my name, addr etc. BUT, the Baycom doesnt see it. I can see the activity in the lower window, but my Baycom software misses it. Now is it possible that the other station responded before I was ready to receive? I'm using an old PC XT. I think the other station is using a 486 machine. Is there a parameter I can change for this? Or am I stuck with a slow computer? Or?

Doug, N4IJ

492. Re: MacTCP radio driver?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-04 15:46:31 UTC
From: emery@bert.cs.byu.edu
Message-ID: <EMERY.93Oct4094632@bert.cs.byu.edu>
Source record: 51428

On Sat, 2 Oct 1993 16:11:03 GMT, gary@ke4zv.atl.ga.us (Gary Coffman) said:

> In article <1993Oct1.033319.10927@news.yale.edu> ewing@cis.yale.edu (Martin Ewing) writes:
>>It seems that one approach to Macintosh tcp/ip radio would be to
>>do away with ka9q (Net/Mac, not the person :-) and use the standard
>>MacTCP network package that we use on Ethernet or LocalTalk. One
>>would need a driver to tell it about AX.25. After you had that, you
>>could use NCSA Telnet, and various other PD Mac packages.
>>
>>Has anyone done this or looked into it?

> There's a problem with using native TCP/IP for this purpose. You
> can't set the parameters to avoid sending a packet storm on
> connection attempts. The timing will be for ethernet or localtalk
> rather than for a AX25 radio link.

Yes, that's a good point but I think that if the MacTCP driver were
rewritten for use on packet radio, those parameters could be incorporated
into it. I did read somewhere that someone was working on this. Does
anyone know who it is?

>That's why most people use a cheap dos box running KA9Q as a intermediate
>router. It can confine the packet storm to the ethernet by appropriate setting
>of parameters.

Finally, a good use for a PC :-)

> Gary

> --
> Gary Coffman KE4ZV |"If 10% is good enough | gatech!wa4mei!ke4zv!gary
> Destructive Testing Systems | for Jesus, it's good | uunet!rsiatl!ke4zv!gary
> 534 Shannon Way | enough for Uncle Sam."| emory!kd4nc!ke4zv!gary
> Lawrenceville, GA 30244 | -Ray Stevens |

Emery, KB7TER

493. Re: BAYCOM does not run under OS/2

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-04 17:06:42 UTC
From: ignacy@misz.animal.uiuc.edu
Message-ID: <28pl72$n4c@vixen.cso.uiuc.edu>
Source record: 51431

In <9310011949.AA04499@ucsd.edu>
William=E.=Newkirk%Pubs%GenAv.Mlb@ns14.cca.CR.rockwell.COM writes:
>>I can't get BAYCOM to run under OS/2. I tried many options in the DOS
>>window. Under OS/2, BAYCOM never receives any packet, and it
>>terminates due to illegal instruction
>>I prefer to run BAYCOM under OS/2 because the computer is not tied
>>up.
>>Ignacy Misztal, NO9E, SP8FWB
>
>didja try the VMB method also (dos image boot) or just OS/2 in VDM (OS/2
>emulates DOS) method? i've got a couple of things (old sony cd-rom, and 1
>program) that work better under a DOS image than under OS/2's "DOS session".
>
>bill wb9ivr
Many replies to my original posts suggest that BAYCOM depends on
accurate timing and that OS/2 cannot secure this. I will check the
VMB, though.

Ignacy Misztal Ham radio: NO9E, SP8FWB
Internet: ignacy@uiuc.edu Bitnet: ignacy@uiucvmd.bitnet
University Of Illinois 1207 W. Gregory Dr., Urbana, IL 61801, USA
tel. (217) 244-3164 Fax: (217) 333-8286

494. BPQ 4.06k

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-04 19:59:54 UTC
From: dave@llondel.demon.co.uk
Message-ID: <749789994snx@llondel.demon.co.uk>
Source record: 51432

Dave
--

```
*****************************************************************************
* G4WRW @ GB7WRW.#41.GBR.EU AX25 * Start at the beginning. Go on *
* dave@llondel.demon.co.uk Internet * until the end. Then stop. *
* g4wrw@g4wrw.ampr.org Amprnet * (the king to the white rabbit) *
*****************************************************************************
```

495. Re: Responsibility for B

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-04 22:05:22 UTC
From: kennykb@dssv01.crd.ge.com
Message-ID: <CEE80y.7vE@crdnns.crd.ge.com>
Source record: 51433

In article <749500213.AA00140@afarm.uucp> Burt Kaufman
<Burt.Kaufman@f40.n382.z1.fidonet.org> writes:
|> Okay. But how is the first forwarder supposed to know whether or
|> not the call sign was faked? How will this help?

How about, `I know what stations are authorized to communicate with my
system. I require cryptographic authentication (public key signature)
for all forwarded traffic for which I am first forwarder.'

And yes, crypto authentication on ham traffic IS legal; Part 97
citation on request.

73 de ke9tv/2, Kevin KENNY GE Corporate R&D, Niskayuna, New York, USA
GCS/E d++(--) -p+ c++ !l u+(---) e--- m++(*) n+ h--- f+ s+/+ g+++ w+ t r@ y+

496. Re: Responsibility for B

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-05 01:53:44 UTC
From: enge@enge.almaden.ibm.com
Message-ID: <28qk38$em2@juniper.almaden.ibm.com>
Source record: 51435

In article <CEE80y.7vE@crdnns.crd.ge.com>,
Kevin B. Kenny <kennykb@crd.ge.com> wrote:
>
>In article <749500213.AA00140@afarm.uucp> Burt Kaufman
> <Burt.Kaufman@f40.n382.z1.fidonet.org> writes:
>|> Okay. But how is the first forwarder supposed to know whether or
>|> not the call sign was faked? How will this help?
>
>How about, `I know what stations are authorized to communicate with my
>system. I require cryptographic authentication (public key signature)
>for all forwarded traffic for which I am first forwarder.'
>
>And yes, crypto authentication on ham traffic IS legal; Part 97
>citation on request.
>
>73 de ke9tv/2, Kevin KENNY GE Corporate R&D, Niskayuna, New York, USA
>GCS/E d++(--) -p+ c++ !l u+(---) e--- m++(*) n+ h--- f+ s+/+ g+++ w+ t r@ y+

Crypto authorization is NOT required. Latest versions of AA4RE beta
include authorization using MD5. MD5 is useful because it is not
considered encryption since it is a one-way transformation. You can
also use the challenge/response system of randomly selecting some
characters from a "secret". AA4RE BBS also offers this as an option.

Roy Engehausen, AA4RE
enge@almaden.ibm.com

497. Re: Soundblaster (tm) for multi-mode digital communications

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-05 02:21:26 UTC
From: bross@quapaw.astate.edu
Message-ID: <1993Oct4.202127.2001@ualr.edu>
Source record: 51434

: There is also a program (FFTMORSE in the HAM directory on Simtel (RIP)
: mirrors) which will decode morse code. (One of my unfinished projects is
: an enhanced GCC compiled 32 bit version.) The original has problems with
: SB Pros (I could post my fix for it on the condition that I get feedback on
: whether it works - it reportedly does not always do so).

I have a Pro Audio Spectrum 16 and a 486/33, and I can't get this program to
work. I also can't get a program called DTMF that is supposed to decode
DTMF tones to work. (it was based on FFTMORSE) I tried it on a friend's
computer (he has a 486/25 and a SB 1.0) and it wouldn't work either.
The docs say that it uses the clock on the SB for timing, so I guess the
speed of the computer wouldn't affect it that much.

: >This leads to a simple question : "Can the Soundblaster (tm) be programmed
: >to do all the 1200, 2400, 9600, afsk, psk, etc. TNC work, (Color) SSTV,
: >WEFAX, RTTY, CW, AMTOR, FAX, PACTOR, CCTSS, DTMF, etc. etc. work that a
: >multi-mode digital controller does ?"

I am very interested in a program that will do this. I am pretty sure
that it is possible with a 486 and a 16 bit 44.1khz sound card.

498. re: HAPN Packet.

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-05 04:08:50 UTC
From: Carl Makin <makinc@hhcs.gov.au>
Message-ID: <1993Oct5.140850.815@hhcs.gov.au>
Source record: 51437

In article <CDnouC.r3@world.std.com> Eric A Cottrell, eac@world.std.com writes:

> The HAPN Modem is a 4800 baud modem put out by a group called HAPN. It's
> advantage over 9600 baud is the audio can be fed into the mic and taken
> from the speaker without modification (or little modification?).

No. The HAPN 4800 baud modem REQUIRES you to go direct to the discriminator
for the receive audio and the modulator for the TX. It can, however,
handle both FM and Phase mod radios. We have quite a few running
around here and in Sydney and Melbourne (Well over 100 in all). The
local group here also has a 4800 baud modem kit out that is compatable
with the HAPN one but includes a 7910 as well.

> The local TCP/IP group got two to try but ran into problems getting them to
> work right.

They work fine once you've modified the radio.

Carl.
(I have 2!)
--
Carl Makin (VK1KCM)
makinc@hhcs.gov.au (Internet) / vk1kcm@vk1kcm.act.aus.oc (Amprnet)
'The best book on programming for the layman is "Alice in Wonderland";
but that's because it's the best book on anything for the layman.'

499. MFJ-1278 Multi Mode Data Controller for sale

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-05 04:40:38 UTC
From: barhodes@waikato.ac.nz
Message-ID: <1993Oct5.174038.20512@waikato.ac.nz>
Source record: 51436

I have an MFJ-1278 PACKET modem for sale handles packet, rtty, weefax, amtor etc, fitted with MFJ-2400 Board complete with MFJ-1284 Software disk (original) NZ$ 650 ono

cheerez

Brucee , Zl1ubr

500. Re: BPQ 4.06k

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-05 06:28:41 UTC
From: dave@llondel.demon.co.uk
Message-ID: <749827721snx@llondel.demon.co.uk>
Source record: 51295

In article <749789994snx@llondel.demon.co.uk> dave@llondel.demon.co.uk writes:
>
Now who ate the text? What I meant to say is that BPQ4.06k is now in /pub/ham
on ftp.demon.co.uk. It will doubtless appear in all sorts of other places
real soon now.

Dave
--

****
* G4WRW @ GB7WRW.#41.GBR.EU AX25 * Start at the beginning. Go on *
* dave@llondel.demon.co.uk Internet * until the end. Then stop. *
* g4wrw@g4wrw.ampr.org Amprnet * (the king to the white rabbit) *
****

501. Re: DVR4-10's @ 450mhz

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-05 12:43:14 UTC
From: kelsey@csn.org
Message-ID: <CEFCo3.M81@csn.org>
Source record: 51438

Dave Ewaldz (dewaldz@ingersoll.COM) wrote:
: We are in the process of setting up a local 9600 backbone link on 70cm here,
: and one of the participants has purchased a Kantronics D4-10 radio for his end.
: The link is on 440.050 mhz. The Kantronics manual leads one to believe these
: radios can't go this high in frequency. Anyone have any luck with these rascals
: above 440mhz?
: Any feedback would be appreciated.

: --
: --
: Dave
: +---+
: | Dave Ewaldz THE INGERSOLL MILLING MACHINE CO. |
: | Rockford, Illinois, Usa |
: | |
: | Internet - dewaldz@ingersoll.com |
: | Amprnet - n9hkm%n9hkm.ampr.org@ke9yq.ampr.org |
: | [44.72.75.33] |
: | ax25 mail - n9hkm@n9hkm.#ncil.il.usa.na |
: | Ma-Bell - (815)-633-7031 |
: +---+
We have one running on 446.5 - had to re-tweak as per the manual. The
problem we have had with the unit is that it is not stable enough to work
well.

Has anyone else made one of these things stop drifting enough to work for
more than a few hours ??

73 - Bill - N8ET

502. Re: Baycom Modem Problem

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-05 17:48:25 UTC
From: bat@gdstech.GRUMMAN.COM
Message-ID: <BAT.93Oct5124825@gdstech.GRUMMAN.COM>
Source record: 51291

There was a known problem of that same nature with BBS's called MSYS.
They would return packets to your Baycom, but these were not
recognized, and the connection never completed. It was rumored that
the MSYS sysop could set a parameter to correct the problem.
--
--
* Pat Masterson D12-25 | KE2LJ@KC2FD *
* Grumman Data Systems | 516-346-6316. *
* Bethpage, NY 11746 | bat@gdstech.grumman.com *

503. Re: Responsibility for B

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-05 17:50:08 UTC
From: William=E.=Newkirk%Pubs%GenAv.Mlb@ns14.cca.CR.rockwell.COM
Message-ID: <9310051754.AA00670@ucsd.edu>
Source record: 51290

>Crypto authorization is NOT required. Latest versions of AA4RE beta
>include authorization using MD5. MD5 is useful because it is not
...
>
>Roy Engehausen, AA4RE
>enge@almaden.ibm.com

true, but it could depend on how much you want to annoy the Authorities -- a worldwide amateur radio data network running inside crypto so we can tell who's responsible for what.

counterproposal: do away with the content rules and we'll go back to plain english.

would they give up content restrictions to prevent the widespread use of hard-to bread crypto by hobbyists ? or would they just eliminate us altogether?

tough choice.

bill wb9ivr
wb9ivr%pubs%genav.mlb@ns14.cca.cr.rockwell.com

504. Re: WWV clock wanted

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-05 22:45:05 UTC
From: dave@frackit.UUCP
Message-ID: <3435@frackit.UUCP>
Source record: 51294
Cross-posted to:
alt.radio.scanner,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.shortwave,rec.radio.scanner

In article <28koeu$jql@darkstar.UCSC.EDU>, darrell@cse.ucsc.edu (Darrell Long) writes:
- At one time Heathkit (which I understand is demised, if not and you have
- their number send it tome) sold a "Most Accurate Clock" which was as WWV
- receiver with RS-232 output. I need to get something like that for a
- research project I am working on.

Heathkit lives, barely. Most Accurate Clock II is in the catalog at
$349.95. It's not the Heathkit we grew up with though. Sad to say the
number of kits is near zero. Most everything is already built or
educational kits. Very little of the old familiar hobbyists paradise
survives.

They even dropped the revolving charge they used to have and
never bothered to tell anyone about it. Imagine my surprise when I
decided to order something from the catalod and found no space for
"Revolving Charge" under method of payment.

They call themselves "Heathkit Educational Systems" now.

P.O. Box 8589
Benton Harbor, MI 49023-8589

+1 800 253 0570

How the mighty have {fallen|changed}

- If you know where I could find such a thing, please drop me a note.

I'll email this as well.

--
vogon1!frackit!dave@psuvax1.psu.edu | Dave Ratcliffe |
- or - ..uunet!wa3wbu!frackit!dave | <*> |
- or - dave.ratcliffe@p777.f211.n270.z1.fidonet.org | Harrisburg, Pa. |

505. Re: Parts search

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-06 00:59:40 UTC
From: kevin@TorreyPinesCA.ncr.com
Message-ID: <1993Oct6.005940.9706@TorreyPinesCA.ncr.com>
Source record: 51292

You could do what I did...get a DB-9 shell and the two connector plugs from Radio Shack, cut two holes in a rectangular piece of copper circuit board material (or anything stiff enough, R.S. perfboard should work) to fit the two connectors in, and glue that into the DB-9 shell. Mil-spec!

--
[] [] [][] [][] Kevin Sanders, KN6FQ NCR Torrey Pines
[] [] [] [] [] kevin.sanders@torreypinesca.ncr.com (619) 597-3602
[][] [][] [][] kevin%beacons@cyber.net
[] [] [] [] []
[] [] [] [] [][] Dump MS-DOS. Prevent Programmer Burnout with Linux.

506. Re: Baycom Modem Problem

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-06 03:00:31 UTC
From: misc023@csc.canterbury.ac.nz
Message-ID: <1993Oct6.150031.1@csc.canterbury.ac.nz>
Source record: 51293

The major problem with BayCom was it would not recognise AX25 level 1 properly, this is why it would not work with early MSYS BBS's (I assume by now 115 is using lvl 2!)...

Thus it may be the system you are attempting to connect to is using the early protocol. My suggestion would be that you _try_ TFPCX with SP or Graphic Packet. Alternatively (and even better 'cos it has full 'YAPP' facility, and interfaces well with FBB BBS's) TPK run with BPQ and AX25EXT will work well with a BayCom modem. Note however that most of these programs will require at least a 286, apart from the SP/TFPCX combination.

Since I no longer have a copy of any early MSYS versions I cannot be absolutely sure if these will work but it's worth a go...

Cheers de Luke (ZL2JF@ZL2JF.#80.NZL.OC)

507. re: Public apology message

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-06 14:53:28 UTC
From: kf5mg@vnet.ibm.com
Message-ID: <CEHDD4.19q5@hawnews.watson.ibm.com>
Source record: 51300

Has anyone read the Public Apology message sent to the guy in Ohio who was upset that a sysop deleted one of his mod file messages. It had something to do with the modification of scanners to receive Cellular Phone freqs I beleive. The guy was threating to sue AND attempt to get the BBS sysop's liscense pulled becasue his message got deleted. He feels that because some one who runs a PBBS (Public BBS - his words) is legally obligated to display and forward any message that comes into their system.
Any comments? Does this flake xxxxx gentelman represent how the rest of Ohio and the world interpret the operation of a PBBS? I'll append the entire message if anyone hasn't seen it.

73's de Jack - kf5mg
AX25net - kf5mg@kf5mg.#dfw.tx.usa.na - (817) 962-4409
Internet - kf5mg@kf5mg.ampr.org - 44.28.0.14
Worknet - kf5mg@vnet.ibm.com

508. Re: your LISTSERV request "list ham-digital"

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-06 16:04:15 UTC
From: Listserv@ucsd
Message-ID: <9310061604.AA14434@ucsd.edu>
Source record: 51297

```
Per request by marti@isburg.ch.
"list ham-digital"
'ham-digital' is not subscribed to any mailing lists.
```

509. Is IC24AT OK for Packet?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-06 16:18:33 UTC
From: rossi@VFL.Paramax.COM
Message-ID: <1993Oct6.161833.16299@VFL.Paramax.COM>
Source record: 51296

I hope to finally try getting set up for packet this fall. Seems like most of what I read and hear about packet is problems people have getting some part of their system to work...

Should I be able to expect reasonable success on packet with my IC24AT HT?

One other note/question... I was looking over the IC24AT schematic in my service manual and it shows the SPEAKER jack as being a two-circuit (stereo) type with a signal labeled "BUSY" going to the second connection. The manual does not make any mention of it. Will the TNC need/use this extra signal?

Please respond via e-mail.

==========
Pete Rossi - WA3NNA rossi@vfl.paramax.COM

Unisys Corporation - Government Systems Group
Valley Forge Engineering Center - Paoli, Pennsylvania
==========

510. Latest WG7J NOS? JN110x10.ZIP ?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-06 21:25:22 UTC
From: bbattles@arrl.org
Message-ID: <2395@arrl.org>
Source record: 51301

Anybody know where I can grab a copy of the latest incarnation of JNOS (by Johan, WG7J)? I've seen JN110x10.ZIP on hydra.carleton.ca (which iz only source coode, no .EXEs). Is that the latest? Has anybody played with a compiled version yet? Is there one available anyplace for anonymous FTP or BBS download? (And, BTW, is there a compiled .EXE of that version *without* NetROM?)

Me not a C compiler person, so I'd like to grab a working model.

Thanks!

CUL es 73 de BB

"""
Brian Battles, WS1O I Tel 203-666-1541, ext 222 I "Radio amateurs
QST Features Editor I Fax 203-665-7531 I do it with high
ARRL HQ I Internet bbattles@arrl.org I frequency"
Newington, CT USA I Amprnet ws1o@ws1o.ampr.org [44.88.0.87]
"""

COMMENTS EXPRESSED HEREIN ARE MY OWN PERSONAL REMARKS AND ARE NOT TO BE CONSIDERED OFFICIAL ARRL VIEWS OR POLICY..

511. MFJ-1229 for sale

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-06 23:37:35 UTC
From: szhall@bullwinkle.ucdavis.edu
Message-ID: <CEI1Mo.L4w@ucdavis.edu>
Source record: 51298

I have a MFJ-1229 for sale-It is an interface for HF ritty and CW..It works with c-64 and Apple computor asking $35.00 or trade for CW keyer with memory..tnx..Jeff N6MYF

512. Re: BPQ 4.06k

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-07 10:14:36 UTC
From: eeyimkn@unicorn.nott.ac.uk
Message-ID: <290q6c$6bn@unicorn.ccc.nottingham.ac.uk>
Source record: 51299

In article <749827721snx@llondel.demon.co.uk> dave@llondel.demon.co.uk writes:
>In article <749789994snx@llondel.demon.co.uk> dave@llondel.demon.co.uk writes:
>>
>Now who ate the text? What I meant to say is that BPQ4.06k is now in /pub/ham
>on ftp.demon.co.uk. It will doubtless appear in all sorts of other places
>real soon now.
>

It's also now on ucsd.edu, /hamradio/packet/tcpip/incoming/bpq406k.zip.
I went to upload it a couple of days ago and it was already there, very
surprising considering that I only got the disk from BPQ last Sunday.. :-)

Mike

--
+--------------------------- O Mike Knell, University of Nottingham, UK -+
| Nevertheless.. -/ \- Internet: eeyimkn@unicorn.nott.ac.uk |
| the Turtle Moves! -_/- AX25: g7gpa@gb7bad.#23.gbr.eu |
+--M.T.V. - GET OFF THE AIR!-- | AMPRnet: mpk@hobbes.g7gpa.ampr.org -------+

513. Re: Latest WG7J NOS? JN110x10.ZIP ?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-07 14:02:38 UTC
From: acourt@ncc.uky.edu
Message-ID: <CEJ5oF.EAI@ms.uky.edu>
Source record: 51302

bbattles@arrl.org (Brian Battles WS1O) writes:

: Anybody know where I can grab a copy of the latest incarnation of JNOS (by
: Johan, WG7J)? I've seen JN110x10.ZIP on hydra.carleton.ca (which iz only
: source coode, no .EXEs). Is that the latest? Has anybody played with a
: compiled version yet? Is there one available anyplace for anonymous FTP or
: BBS download? (And, BTW, is there a compiled .EXE of that version *without*
: NetROM?)
:

Johan has placed the latest sources and a compiled executable on
ftp.ece.orst.edu in the /pub/ham/wg7j directory.
Several folks have already tried it, and found it to be quite buggy. The
mail indexing program does not work, the system locks up during forwarding,
and the whole thing is rife with memory leaks.

Still, it looks like it will be really nice once the problems are tracked
down and corrected. He has added an smtp tdisc command, and forwarding
will be driven by the indexes, which should speed things up considerably.

I would recommend staying with 110x9 for the time being.

73,

Allan

--
Allan Courtney KD4DBN Internet: acourt@ncc.uky.edu
Lexington, Kentucky AMPRNet: 44.106.2.120
Is there a 12 step program for people who are hooked on phonics?

514. Re: Public apology message

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-07 15:02:52 UTC
From: jms@col.hp.com
Message-ID: <291b2s$ea1@hp-col.col.hp.com>
Source record: 51306

Jack Snodgrass (kf5mg@vnet.ibm.com) wrote:
: Has anyone read the Public Apology message sent to the guy in Ohio who was
: upset that a sysop deleted one of his mod file messages. It had something to
: do with the modification of scanners to receive Cellular Phone freqs I
: beleive. The guy was threating to sue AND attempt to get the BBS sysop's
: liscense pulled becasue his message got deleted. He feels that because some
: one who runs a PBBS (Public BBS - his words) is legally obligated to display
: and forward any message that comes into their system.
: Any comments? Does this flake xxxxx gentelman represent how the rest of
: Ohio and the world interpret the operation of a PBBS? I'll append the entire
: message if anyone hasn't seen it.

I assume you're talking about a packet bbs? My opinion is that a pbbs
sysop has the right to delete any type of message he wants. It's his
equipment and his license.

Mike, K0TER, Colorado

515. PA0GRI NOS 2.0m and DOS 6/QEMM 7.01

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-07 17:10:59 UTC
From: sfarlow@NeoSoft.com
Message-ID: <CEJEED.Cq6@sugar.NeoSoft.COM>
Source record: 51304

Has anyone had intermittent pronlems starting up NOS on a 486/33
running MS-DOS 6.0 and QEMM 7.01 ? I ocassionally have problems
starting NOS for packet radio TCP/IP such as getting to the dialer
command and having a line repeatedly run across the bottom of the
screen and then getting a message regarding an invalid pointer.
I have had to reboot hte PC as many as 5 times before NOS would start
running normally. HELP !

sfarlow@sugar.neosoft.com

516. Re: Public apology message

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-07 18:16:59 UTC
From: dave@llondel.demon.co.uk
Message-ID: <750043019snx@llondel.demon.co.uk>
Source record: 51308

In article <CEHDD4.19q5@hawnews.watson.ibm.com> kf5mg@vnet.ibm.com (Jack Snodgrass) writes:
> Has anyone read the Public Apology message sent to the guy in Ohio who was
>upset that a sysop deleted one of his mod file messages. It had something to
>do with the modification of scanners to receive Cellular Phone freqs I
>beleive. The guy was threating to sue AND attempt to get the BBS sysop's
>liscense pulled becasue his message got deleted. He feels that because some
>one who runs a PBBS (Public BBS - his words) is legally obligated to display
>and forward any message that comes into their system.
> Any comments? Does this flake xxxxx gentelman represent how the rest of
>Ohio and the world interpret the operation of a PBBS? I'll append the entire
>message if anyone hasn't seen it.
>
I haven't seen his message, but as far as I am concerned, the final say as to what is on my BBS is entirely *mine*. I am not sure what the USA regs are, but my BBS is run under a variation of *my* licence.

Dave
--

****
* G4WRW @ GB7WRW.#41.GBR.EU AX25 * Start at the beginning. Go on *
* dave@llondel.demon.co.uk Internet * until the end. Then stop. *
* g4wrw@g4wrw.ampr.org Amprnet * (the king to the white rabbit) *
****

517. Re: re: Public apology message

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-07 21:51:14 UTC
From: MARK@ardsley.business.uwo.ca
Message-ID: <MARK.487.2CB48F52@ardsley.business.uwo.ca>
Source record: 51305

In article <CEHDD4.19q5@hawnews.watson.ibm.com> kf5mg@vnet.ibm.com (Jack Snodgrass) writes:
>From: kf5mg@vnet.ibm.com (Jack Snodgrass)
>Subject: re: Public apology message
>Date: Wed, 6 Oct 1993 14:53:28 GMT

> Has anyone read the Public Apology message sent to the guy in Ohio who was
>upset that a sysop deleted one of his mod file messages. It had something to
>do with the modification of scanners to receive Cellular Phone freqs I
>beleive. The guy was threating to sue AND attempt to get the BBS sysop's
>liscense pulled becasue his message got deleted. He feels that because some
>one who runs a PBBS (Public BBS - his words) is legally obligated to display
>and forward any message that comes into their system.
> Any comments? Does this flake xxxxx gentelman represent how the rest of
>Ohio and the world interpret the operation of a PBBS? I'll append the entire
>message if anyone hasn't seen it.

Interesting problem.

Users demand that their messages should be posted and delivered.

FCC states that the operator is responsible for anything on their pbbs.

You simply can't win!

In this case, the person is whining because the pbbs operator was unwilling
to have detailed information on how to perform an illegal act on his machine.

=-=
Mark Bramwell, VE3PZR Located in sunny London, Ontario

Internet: Mark@ARDSLEY.business.uwo.ca IP Address: 129.100.22.33
Packet: VE3PZR @ VE3GYQ UWO Phone: (519) 661-3714

518. kdk to baycom packet modem

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-07 22:39:05 UTC
From: jarman@waikato.ac.nz
Message-ID: <1993Oct8.113905.20594@waikato.ac.nz>
Source record: 51303

Hi,
Has anyone got the connections to hook up a
KDK model FM240 2m transciever to a BayCom
packet modem.

Thanks
PJ zl1vpj

519. Re: Public apology message

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-08 00:59:57 UTC
From: Randyb@randyb.byu.edu
Message-ID: <1993Oct8.011521.2958@yvax.byu.edu>
Source record: 51309

In <CEHDD4.19q5@hawnews.watson.ibm.com> kf5mg@vnet.ibm.com (Jack Snodgrass) writes:
| Has anyone read the Public Apology message sent to the guy in Ohio who was
...TEXT Deleted

| 73's de Jack - kf5mg
| AX25net - kf5mg@kf5mg.#dfw.tx.usa.na - (817) 962-4409
| Internet - kf5mg@kf5mg.ampr.org - 44.28.0.14
| Worknet - kf5mg@vnet.ibm.com
|

I personally Think the "Apologizing Sysop" is the one with the last laugh.
The lid who sent the threat out is probably so buried in flames that he'll
probably have to do a mass delete without reading them! (Then we should be
able to sue him right?)

So whats the official definition for "PBBS"? I figured it was "Packet BBS".
It sure ain't "Public" or why do I have to have a license?

--
Randy Bateman
KBYU TV & FM Engineering
Brigham Young University
randyb@byu.edu
wb7esh@byu.edu

520. Data compression for packet?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-08 05:15:49 UTC
From: drenze@icaen.uiowa.edu
Message-ID: <1993Oct8.051549.24748@news.uiowa.edu>
Source record: 51307

I'm interested in any research done into on-the-fly data compression to achieve greater effective throughput for packet radio. It seems to me that this might be a field ripe for investigation.

73, Doug N0YVW

--
__ /| | Douglas J Renze, N0YVW |
\'o.O' | +1 319 337 4664 | In God We Trust:
=(___)= | drenze@icaen.uiowa.edu | All Others Pay Cash
U | Douglas-Renze@uiowa.edu |

521. which nos to use ?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-08 12:18:30 UTC
From: pp@wsinti09.info.win.tue.nl
Message-ID: <293lqm$9bk@wsinti09.info.win.tue.nl>
Source record: 51310

Hi there, fellow packeteers,

In search for a nice tcp/ip package for packet radio using my home-brew baycom modem I stumbled across dozens of .zip's all containing one or another nos adapted by several people. What I'd like to find (if it's out there) is some nos package that has an easy install, or is zippped using the standard directory structure that goes for this stuff. I need the nos package to be able to attach a packet driver (I use a baycom modem and an ax25 packet driver)

Furthermore I'd like to get my hands on an autoexec.nos and a domain.txt and all that stuff that is especially set up for a system/region, that have enough comment so that I can configure it... (I did read the manual, but some REAL examples would help). I'm not saying that the examples in the manual are useless or incorrect, and I do not expect a tailor made example in the manuals, they just do not give an example of what to do if you live in the southern part of the Netherlands. So I'd like to urge the dutch amateurs in the south of the Netherlands to help me out with an autoexec.nos (especially if you live near Eindhoven...).

Thanks very much for any help in advance,

Peter.
--
Peter Peters	UUCP : pp@win.tue.nl
Eindhoven University of Technology (TUE)	PHONE : +31-40-474120
Dept. of Mathematics and Computer Science	FAX : +31-40-463992
Disclaimer : I said WHAT ???	VHF : pa0ppe

522. Re: Public apology message

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-08 12:33:33 UTC
From: sbrown@charon.dseg.ti.com
Message-ID: <SBROWN.93Oct8063333@charon.dseg.ti.com>
Source record: 51313

In article <MARK.487.2CB48F52@ardsley.business.uwo.ca>
MARK@ardsley.business.uwo.ca (Mark_Bramwell) writes, commenting on
a posting from Jack, kf5mg:

> In this case, the person is whining because the pbbs operator was unwilling
> to have detailed information on how to perform an illegal act on his machine.

I thought I remembered something in Part 97 (U.S. Radio Law) to the
effect that it was illegal for an amateur radio operator to engage in
communications which supported illegal activities, however, I searched
through my on-line copy of Part 97 this morning and couldn't find it.
Prior to searching Part 97, I would have taken the position that the
Packet BBS operator was not only well within his rights but also
defending his license by killing the message containing instructions
for perfroming an illegal act.

Am I dreaming that Part 97 previouly had such a prohibition in it?
Or, maybe I just overlooked the prohibition still in Part 97.

73,

****
Steve Brown, WD5HCY	
sbrown@charon.dseg.ti.com	Simplicate
wd5hcy@wd5hcy.ampr.org	and add
[44.28.0.61]	lightness.
wd5hcy@kf5mg.#dfw.tx.usa.na	
****

523. Re: re: Public apology- Cellular mod

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-08 12:45:19 UTC
From: henniger@Metaphor.COM
Message-ID: <3375@cronos.metaphor.com>
Source record: 51311

In article <MARK.487.2CB48F52@ardsley.business.uwo.ca>, MARK@ardsley.business.uwo.ca (Mark_Bramwell) writes:
|> In article <CEHDD4.19q5@hawnews.watson.ibm.com> kf5mg@vnet.ibm.com (Jack Snodgrass) writes:
|> >From: kf5mg@vnet.ibm.com (Jack Snodgrass)
|> >Subject: re: Public apology message
|> >Date: Wed, 6 Oct 1993 14:53:28 GMT
|>
|> > Has anyone read the Public Apology message sent to the guy in Ohio who was
|> >upset that a sysop deleted one of his mod file messages. It had something to
|> >do with the modification of scanners to receive Cellular Phone freqs I
|> >beleive. The guy was threating to sue AND attempt to get the BBS sysop's
|> >liscense pulled becasue his message got deleted. He feels that because some
|> >one who runs a PBBS (Public BBS - his words) is legally obligated to display
|> >and forward any message that comes into their system.
|> > Any comments? Does this flake xxxxx gentelman represent how the rest of
|> >Ohio and the world interpret the operation of a PBBS? I'll append the entire
|> >message if anyone hasn't seen it.
|>
|>
|> Interesting problem.
|>
|> Users demand that their messages should be posted and delivered.
|>
|> FCC states that the operator is responsible for anything on their pbbs.
|>
|>
|> You simply can't win!
|>
|> In this case, the person is whining because the pbbs operator was unwilling
|> to have detailed information on how to perform an illegal act on his machine.
|>
^^^^^^^^^^^

Such mods are not illegal here in the US.

Mick
(wb5von)

524. Re: Data compression for packet?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-08 12:59:07 UTC
From: henniger@Metaphor.COM
Message-ID: <3376@cronos.metaphor.com>
Source record: 51312

In article <1993Oct8.051549.24748@news.uiowa.edu>, drenze@icaen.uiowa.edu (Douglas J Renze) writes:
|> I'm interested in any research done into on-the-fly data compression to
|> achieve greater effective throughput for packet radio. It seems to me that
|> this might be a field ripe for investigation.
|>
|> 73, Doug N0YVW
|>
|> --
|> __ /| | Douglas J Renze, N0YVW |
|> \'o.O' | +1 319 337 4664 | In God We Trust:
|> =(___)= | drenze@icaen.uiowa.edu | All Others Pay Cash
|> U | Douglas-Renze@uiowa.edu |

I recommend Lempel-Zev or a derivative.

gzip is a utility which implements various sorts of compression including lzw.

gzip is free software, you can redistribute it and/or modify it under
the terms of the GNU General Public License, a copy of which is
provided under the name COPYING. The latest version of gzip are always
available by ftp in prep.ai.mit.edu:/pub/gnu, or in any of the prep
mirror sites.

Mick
(wb5von)

525. re: Public Apology

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-08 13:12:58 UTC
From: kf5mg@vnet.ibm.com
Message-ID: <CEKy1n.Cvr@hawnews.watson.ibm.com>
Source record: 51324

What follows is the text of the Apology and the message that
triggered it. The message is a hoot. I moved the SMTP headers
to the bottom of the note for viewing. The rest of the note is
'as is'.

----- Forwarded message -----

From: N7XBM@N7WVZ.#NENEV.NV.USA.NA
To : ALL@ALLUSA

RANDY,

AS PER YOUR REQUEST, HERE IS A PUBLIC APOLOGY FOR HAVING KILLED YOUR
MESSAGE REQUESTING CELULAR MODIFICATIONS FOR A SCANNER.
SO THAT THE REST OF THE AMATEUR PUBLIC UNDERSTAND WHAT THIS APOLOGY IS
ALL ABOUT, I INCLUDE YOUR LAST MESSAGE AT THE END OF THIS MESSAGE.

I AM SORRY THAT I KILLED YOUR MESSAGE. I RESPONDED TO YOUR SYSOP, SAYING
THAT I PROBABLY OVER REACTED DUE TO A MISSUNDERSTANDING (AND MISSINFORMATION)
OF THE NEW LAW THAT AFFECTED SCANNERS AND THEIR ABILITY TO PICK UP CELLULAR
CONVERSATIONS. I AM ALSO SORRY THAT YOU HAVE CONSIDERED THIS TO BE SUCH
A PROBLEM. IF IT HELPS ANY, YOU CAN SEND ANOTHER MESSAGE AND I WILL
SEE TO IT THAT IT IS FORWARDED TO THE 2 BBS'S THAT MISSED IT THE FIRST TIME,
AS WELL I WILL MAKE SURE THAT IT IS POSTED ON THE N7WVZ BBS FOR A PERIOD
NO LESS THAN 2 WEEKS SO THAT 30 OR SO LOCAL MEMBERS WILL HAVE PLENTY OF
OPPORTUNITY TO VIEW IT. THIS SHOULD MORE THAN MAKE UP FOR ANY DAMMAGES
THAT YOU INCURRED AS A RESULT OF MY MISTAKE.

SHAWN N7XBM (PLEASE GET THE CALL RIGHT WHEN YOU GO FOR MY LICENSE, I WOULD
HATE TO HAVE YOU HURT AN INNOCENT PARTY BECAUSE OF MY ACTIONS(>
COSYSOP @ N7WVZ.#NENEV.NV.USA.NA

_____THE FOLLOWING WAS ORIGIONATED BY KF8TV @ W8HFF_____
_____AND IS INCLUDED FOR THE PURPOSE OF UNDERSTANDING THE ABOVE.

>>> CELLULAR FREQS <<<
Greetings Shawn,

I'm really sorry you killed my cellular phone message. You yourself are in
serious violation of the law by killing my message if you operate a PBBS (
PUBLIC BBS -- with the accentuation on the word PUBLIC!). I am, at this very
moment, consulting with my attorney about ways to prosecute you. Even IF i
DON't win, which I'm pretty sure I will, you will face the inconvenience of
having to come to Ohio to be present in court. But, please remember, you did
this to yourself! And, I will have the last word -- of that you can be
assured! My attorney is even hopeful that he and I will both be handsomely

financially compensated for your ill deed. Dumb mistake!

Docket 93-1, the prohibition against cellular-capable scanners, went into effect on April 26 of this year. Scanners that are cellular-capable are not allowed to be manufactured in this country or imported. That is the law.

Can new scanners, which have cellular capabilities, still in a manufacturer's or dealer's inventory continue to be sold? Yes! Indefinitely! Is it lawful to distribute cellular-restoration information for scanners which have that freq blocked? Yes! Is it lawful to distribute cellular-restoration information? Yes! Check the law and you will find that YOU ARE WRONG!

ONGRESS HAS NO POWER TO RESTRICT DISSEMINATION OF NON-secret information. Is it lawful to modify a scanner to receive cellular? Yes again! Congress has directed the FCC to refuse type acceptance of cellular-capable scabbers, but again, neither has the power to restrict a person from modifying one's own property.

You, my friend, have made a grave error. You stand to lose considerably. If possible, I intend to have your liscense over this issue. If you think I'm just blowing steam, please think about how long it has taken me to reply to your message -- obviously a lot of thought and work has gone into the project. You, sir, will be off the air FOREVER! Now, how do you feel? Do you want to delete any more of my messages? Your liscense is mine!

Now, if you are willing to immediately post a PUBLIC BULLETIN offering a full apology, then I may consider dropping the entire issue. But if such is not seen around the country soon, then your name WILL appear in QST as another loser, and you WILL lose your license, and you WILL pay a stiff fine. Go ahead, don't take me seriously. Go ahead, MAKE MY DAY!

Don't mess around unless you know what you're doing! Welcome to the wonderful world of CB!

Regards,
Randy KF8TV @ W8HHF
[via HF AMTOR]

----- End of forwarded message -----

73's de Jack - kf5mg (running JNOS in a 735K - OS/2 2.1 Dos Box!)
Internet - kf5mg@kf5mg.ampr.org - 44.28.0.14
AX25net - kf5mg@kf5mg.#dfw.tx.usa.noam - home (817) 488-4386
Worknet - kf5mg@vnet.ibm.com - work (817) 962-4409

| "I am Homer of Borg.... Prepare to be assim.... oooo Donuts." |

-------------------- Start of SMTP HEADERS -----------------------------

Received: from dfwgate.ampr.org by vnet.IBM.COM (IBM VM SMTP V2R2) with TCP;
Fri, 08 Oct 93 08:48:10 EDT
Received: from kf5mg.ampr.org by dfwgate.ampr.org (JNOS1.07b+) with SMTP
id AA8158 ; Fri, 08 Oct 93 07:09:55 CST

Date: Fri, 08 Oct 93 07:44:44 GMT
Message-Id: <67086@kf5mg.ampr.org>
From: kf5mg@kf5mg.ampr.org
To: kf5mg@vnet.ibm.com
Subject: re: public apology

----- Forwarded message -----
>From n7xbm%n5vgc@kf5mg.ampr.org Sun Oct 03 08:46:04 1993
Received: from kf5mg.ampr.org by kf5mg.ampr.org (JNOS-107B+) with SMTP
id AA65959 ; Sun, 03 Oct 93 08:45:58 GMT
X-Forwarded-To: N5VGC
Date: 26 Sep 93 22:27:00 UTC
Message-Id: <9414_n7wvz@kf5mg.ampr.org>
From: n7xbm@n7wvz.#nenev.nv.usa.na
To: all@allus
Subject: PUBLIC APPOLOGY
X-BBS-Msg-Type: B
X-BBS-Bid: $9414_n7wvz

---------- End of SMTP HEADERS ------------------------------

526. Re: Data compression for packet?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-08 15:15:31 UTC
From: enge@enge.almaden.ibm.com
Message-ID: <29406j$f9g@juniper.almaden.ibm.com>
Source record: 51314

The PACTOR protocol includes compression. Sure would like to see a packet version.

Roy Engehausen, AA4RE
enge@almaden.ibm.com

527. Re: Public apology message

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-08 16:20:46 UTC
From: jms@col.hp.com
Message-ID: <29440u$1qi@hp-col.col.hp.com>
Source record: 51316

Steve Brown (sbrown@charon.dseg.ti.com) wrote:
: In article <MARK.487.2CB48F52@ardsley.business.uwo.ca>
: MARK@ardsley.business.uwo.ca (Mark_Bramwell) writes, commenting on
: a posting from Jack, kf5mg:

: > In this case, the person is whining because the pbbs operator was unwilling
: > to have detailed information on how to perform an illegal act on his machine.

: I thought I remembered something in Part 97 (U.S. Radio Law) to the
: effect that it was illegal for an amateur radio operator to engage in
: communications which supported illegal activities, however, I searched
: through my on-line copy of Part 97 this morning and couldn't find it.
: Prior to searching Part 97, I would have taken the position that the
: Packet BBS operator was not only well within his rights but also
: defending his license by killing the message containing instructions
: for perfroming an illegal act.

: Am I dreaming that Part 97 previouly had such a prohibition in it?
: Or, maybe I just overlooked the prohibition still in Part 97.

under part 97.113 Prohibited transmissions:

(a) No amateur shall transmit:

(4) Music using a phone emission except as specifically provided
elsewhere in this Section; communications intended to facilitate a
^^
criminal act;.........more stuff in this section (a)(4) not included.
^^^^^^^^^^^^

If a message is intended to help a person modify a scanner/radio to
receive cell phone conversations, which is unlawful (has been for
some time, but somewhat unenforceable, IMHO), then that message
(communication) is not allowed by FCC rules...

You decide...
Mike, K0TER

528. Re: Public apology message

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-08 16:29:36 UTC
From: msanders@sim.es.com
Message-ID: <msanders-081093092936@msanders.sim.es.com>
Source record: 51315

In article <CEHDD4.19q5@hawnews.watson.ibm.com>, kf5mg@vnet.ibm.com (Jack Snodgrass) wrote:

> Has anyone read the Public Apology message sent to the guy in Ohio who was
> upset that a sysop deleted one of his mod file messages. It had something to
> do with the modification of scanners to receive Cellular Phone freqs I
> beleive. The guy was threating to sue AND attempt to get the BBS sysop's
> liscense pulled becasue his message got deleted. He feels that because some
> one who runs a PBBS (Public BBS - his words) is legally obligated to display
> and forward any message that comes into their system.
> Any comments? Does this flake xxxxx gentelman represent how the rest of
> Ohio and the world interpret the operation of a PBBS? I'll append the entire
> message if anyone hasn't seen it.
>
>
I personally believe that a sysop has a responsibility first to protect himself, and has the right and authority to remove any message or file posted on his BBS. Anything questionable should be deleted. I know that is not always a popular message to some people in this world. I have not seen the Public Apology message, and don't really wish to, but common courtesy and humility go a long way to make this world run right. And as we all can see, it isn't running very well in many instances. Just yesterday during our commute session on 2M, one guy in our group was talking (KA7ZLU), and a car behind him was impatient and trying to get by (3 lanes available in each direction). The car behind started bumping and pushing against Randy's bumper to get him out of the way! No Lie! Always check your 6 o'clock, guys. There are others who don't care who you are, or what you are doing, and will dump you if you get in their way!
--
==========

Opinions, thoughts, &cetera are my own and not representative of Evans & Sutherland.

"He flies the sky KB7MSF
Like an Eagle in the eye Amateur Radio
of a hurricane that's abandoned." "Sandman"

America work: (801) 582-5847 ext 6530
FAX: 5848
Salt Lake City Utah home: (801) 224-1757

529. Re: Latest WG7J NOS? JN110x10.ZIP ?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-08 16:53:01 UTC
From: bbattles@arrl.org
Message-ID: <2408@arrl.org>
Source record: 51321

In rec.radio.amateur.digital.misc, acourt@ncc.uky.edu (Allan Courtney) writes:

>bbattles@arrl.org (Brian Battles WS1O) writes:

>: Anybody know where I can grab a copy of the latest incarnation of JNOS (by
>: Johan, WG7J)? I've seen JN110x10.ZIP on hydra.carleton.ca (which iz only
>: source coode, no .EXEs). Is that the latest? Has anybody played with a
>: compiled version yet? Is there one available anyplace for anonymous FTP or
>: BBS download? (And, BTW, is there a compiled .EXE of that version *without*
>: NetROM?)

>Johan has placed the latest sources and a compiled executable on
>ftp.ece.orst.edu in the /pub/ham/wg7j directory. Several people have
>already tried it and found it to be quite buggy. The mail-indexing program
>doesn't work, the system locks up during forwarding, and the whole thing is
>rife with memory leaks.

Wow! All this time, I thought memory leaks were a necessary "feature"
of NOS. 8-)

>Still, it looks like it will be nice once the problems are tracked
>down and corrected. He's added an smtp tdisc command, and forwarding
>will be driven by the indexes, which should speed things up considerably.
>
>I recommend staying with 110x9 for the time being.

Hmmm, sounds like you're advice is worth taking. I don't mind a minor
"buglet" here and there, but I hate it when stuff just locks up, or when
the local MSYS PBBS tries to forward to me on its SMTP port and then fails.
The SysOp uses that as an excuse to bust my stones or bust on NOS!

Hope the "code weenies" can clean up JNOS 110 soon!

Thanks...

CUL es 73 de BB

"""
Brian Battles, WS1O I Tel 203-666-1541, ext 222 I "Radio amateurs
QST Features Editor I Fax 203-665-7531 I do it with high
ARRL HQ I Internet bbattles@arrl.org I frequency"
Newington, CT USA I Amprnet ws1o@ws1o.ampr.org [44.88.0.87]
"""

COMMENTS EXPRESSED HEREIN ARE MY OWN PERSONAL REMARKS AND ARE NOT TO BE
CONSIDERED OFFICIAL ARRL VIEWS OR POLICY..

530. motrac manual wanted

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-08 17:30:22 UTC
From: MULHOLLENJ@CPVA.SAIC.COM
Message-ID: <931008103022.22a06cfc@CPVA.SAIC.COM>
Source record: 51317

Date: Fri, 8 Oct 1993 10:29:19 -0700 (PDT)
From: John Mulhollen (619.552.4788) <MULHOLLENJ@CPVA.SAIC.COM>
To: info-ham@ucsd.edu
Message-Id: <931008102919.22a06cfc@CPVA.SAIC.COM>
Subject: Motrac Manual wanted

I am *really* looking for a manual for my UHF motrac (yes, i have one!).
If you know of anyone that might be willing to share their information
with me, i would greatly appreciate it.

thanks

-johnm
kd6rgw

531. Re: Data compression for packet?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-08 18:11:14 UTC
From: cmoore@rose.hp.com
Message-ID: <294ag2$ad3@hpchase.rose.hp.com>
Source record: 51318

Mickey Henniger (henniger@Metaphor.COM) wrote:

: I recommend Lempel-Zev or a derivative.

Correct me if I'm wrong (I'm sure someone will :-), but I seem to remember
that Lempel-Zev requires characterizing the distribution of data in the
entire file first. If that's true then it couldn't be used for on-the-fly
compression and decompression. Does gzip use L-Z? Can it be used to
continually compress/decompress a stream of data?

Chris Moore
N6IYS
cmoore@mothra.rose.hp

532. Re: Public apology message

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-08 18:21:31 UTC
From: jbloom@arrl.org
Message-ID: <2409@arrl.org>
Source record: 51322

In rec.radio.amateur.digital.misc, sbrown@charon.dseg.ti.com (Steve Brown) writes:
>In article <MARK.487.2CB48F52@ardsley.business.uwo.ca>
>MARK@ardsley.business.uwo.ca (Mark_Bramwell) writes, commenting on
>a posting from Jack, kf5mg:
>
>> In this case, the person is whining because the pbbs operator was unwilling
>> to have detailed information on how to perform an illegal act on his machine.
>
>I thought I remembered something in Part 97 (U.S. Radio Law) to the
>effect that it was illegal for an amateur radio operator to engage in
>communications which supported illegal activities, however, I searched
>through my on-line copy of Part 97 this morning and couldn't find it.

97.113(d) No station shall transmit... messages for any purpose, or in
connection with any activity, that is contrary to federal, state or
local law...

So, next time you're on the repeater telling someone how to hook up a
scanner in their car, make sure it's not illegal to have a mobile scanner
in your town. :-(

Jon Bloom, KE3Z | jbloom@arrl.org
American Radio Relay League |
225 Main St., Newington CT 06111 |

533. Re: DVR4-10's @ 450mhz

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-08 20:07:04 UTC
From: pjb@cco.caltech.edu
Message-ID: <294h98INN72s@gap.caltech.edu>
Source record: 51319

A few of us in southern california are using them on 439.025 mhz with
no problems, at 9600 bd.

Thats not 450, but its halfway there. Wonder why they made these things
for 431? Did it save um any money? Anyone got the scoop on this?

73 de Paul KI6CQ
pjb@cco.caltech.edu

534. Re: which nos to use ?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-08 20:16:58 UTC
From: bbattles@arrl.org
Message-ID: <2412@arrl.org>
Source record: 51323

In rec.radio.amateur.digital.misc, pp@wsinti09.info.win.tue.nl (Peter Peters) writes:
>
>In search for a nice tcp/ip package for packet radio using my home-brew
>baycom modem I stumbled across dozens of .zip's all containing one or
>another nos adapted by several people. What I'd like to find (if it's
>out there) is some nos package that has an easy install, or is zippped
>using the standard directory structure that goes for this stuff. I need
>the nos package to be able to attach a packet driver (I use a baycom
>modem and an ax25 packet driver)
>
>Furthermore I'd like to get my hands on an autoexec.nos and a
>domain.txt and all that stuff that is especially set up for a
>system/region, that have enough comment so that I can configure it...
>(I did read the manual, but some REAL examples would help). I'm not
>saying that the examples in the manual are useless or incorrect, and I
>do not expect a tailor made example in the manuals, they just do not
>give an example of what to do if you live in the southern part of the
>Netherlands. So I'd like to urge the Dutch amateurs in the south of
>the Netherlands to help me out with an autoexec.nos (especially if you
>live near Eindhoven...).

Good gravy, somebody should send this chap the I-net address for PA0GRI!

The Netherlands seems to be a hotbed of NOS development.

CUL es 73 de BB

"""
Brian Battles, WS1O I Tel 203-666-1541, ext 222 I "Radio amateurs
QST Features Editor I Fax 203-665-7531 I do it with high
ARRL HQ I Internet bbattles@arrl.org I frequency"
Newington, CT USA I Amprnet ws1o@ws1o.ampr.org [44.88.0.87]
"""

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535. Re: Anyone using HP95LX for packet?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-09 00:28:37 UTC
From: fmitch@netcom.com
Message-ID: <fmitchCELtBq.3CF@netcom.com>
Source record: 51320

Tim Russell (russell@spdcc.com) wrote:

: I recently acquired an HP95LX palmtop PC, and I'm hoping to turn it, along
: with my HT and a mini TNC, into an extremely portable packet station. Is any-
: one else using this great little PC for packet? I'd be interested in hearing
: from you, either here on via email. Any hints would be appreciated.

: --
: Tim Russell russell@spdcc.com

hi tim... i think i remember seeing a version of nos for the hp95 on
ucsd.edu under the /hamradio/packet subdirectory... u might look there...

--
fmitch@netcom.com
Felton Mitchell, WA4OSR in Mobile, Alabama USA
co-sysop for W4IAX bbs running fbb ... sysop for WA4OSR DXCluster in Mobile..

536. Dataengine Mod Wanted

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-09 16:46:00 UTC
From: steve.jones@canrem.com
Message-ID: <60.1009.5731.0N185C22@canrem.com>
Source record: 51325

Can anyone E-mail me the mod that allows the Dataengine to do 19k2 with an open squelch without generating a mess of interrupts? I seem to recall this would also fix the garbage calls in the mheard list. We're running some Dataengines at 19k2 and notice alot of CRC errors. We assume that this is due to the Dataengine 'falsing' on the open squelch noise.
Thanks in advance,

Steve Jones <steve.jones@canrem.com>

-----BEGIN PGP PUBLIC KEY BLOCK-----
Version: 2.3a

mQA9AiyznJYAAAEBgLo58lXwene0xZytrUzarHz0d6AUPmaWnI0udeHtwZlTvKlq
ZVTimEYShF10BcGHzQAFEbQkU3RldmUgSm9uZXMgPHN0ZXZlLmpvbmVzQGNhbnJl
bS5jb20+
=nIy/
-----END PGP PUBLIC KEY BLOCK-----

* Q-Blue v0.7 [NR] *

537. Re: Public Apology

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-10 01:43:24 UTC
From: sfarlow@NeoSoft.com
Message-ID: <CEnrGD.D0G@sugar.NeoSoft.COM>
Source record: 51328

WHOA !!! Just a minute!. Amateur radio is a HOBBY and is VOLUNTEER !!
If a ham chooses to have a PBBS, he has every prerogative to censor
whatever he chooses. I wouldn't blame this sysop if he shut down his
PBBS.

73 de N5PBD

538. (none)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-10 01:49:07 UTC
From: PECHANEC@eclx.psu.EDU
Message-ID: <01H3X9LW82J68WWN42@eclx.psu.edu>
Source record: 51326

```
HELP
INFO
SUBSCRIBE HAM-DIGITAL Martin Pechanec
```

539. Re: Parts search

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-10 04:02:37 UTC
From: faunt@netcom3.Netcom.COM
Message-ID: <FAUNT.93Oct9200237@netcom3.Netcom.COM>
Source record: 51327

I've got a cable that's made up of the two plugs, fixed the correct distance apart, and held there by a paper spacer and RTV, the whole thing covered by heatshrink. It looks good, and was pretty easily assembled. It was inspired by the one that came with my PacComm Handipacket.
73, doug

540. RE: HAPN packet, what is it? (a REAL answer)?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-10 05:19:19 UTC
From: goldstein@carafe.tay2.dec.com
Message-ID: <1993Oct10.051919.13642@nntpd.lkg.dec.com>
Source record: 51329

In article <N4HY.93Sep21101330@wahoo.ccr-p.ida.org> n4hy@wahoo.ccr-p.ida.org (Bob McGwier) writes:
>...You have encoded two symbol's (zero's and one's) using three symbols.
>Thus you are able to transmit the same information in a more tightly
>controlled spectrum. This is the controlled and planned use of intersymbol
>inteference. The reason the HAPN board does not work well is that it
>is a grossly suboptimal implementation of something that really needs DSP to
>work well. There is a variant of this scheme where
>
>b2 = a2 - a0,
>b3 = a3 - a1,
>b4 = a4 - a2,
>
>where now the `delta encoding' is on every other symbol. This is call
>modified duobinary. This even better spectral properties in that it has the
>same zero in its spectrum that regular duobinary has but it also has no D.C.
>component. Now this would work really well through the audio jack of an FM
>radio. I think we could get 9600 through a mike jack if we use this scheme
>and a Viterbi decoder. With no audio circuit filter degradation, this would
>approach the performance of PSK using an approximate maximum likelihood symbol
>timing algorithm and the VIterbi decoder. I was working on this before I got
>the heave ho from AEA. Too bad for you and them.

I wonder if it's declasse' to reply to such an old note but anyway...
A few years ago, I started a project to build a different 4800 bps modem,
using inverted Alternate Mark Inversion, the form of duobinary used on T1
telephone wires. I never got it done because it needed a clock recovery
circuit and that was too much for a little Continental Specialties push-in
breadboard.

The HAPN article in Ham Radio magazine was pretty fuzzy on the details of
its modulation, though it was obviously duobinary. Where T1 differs from
some others is that it uses Return to Zero. Thus each pulse (1 or -1 if the
signal is Mark, whichever the last Mark wasn't) is only half a baud long.
THis makes the signal a closer fit to a sine wave (the -1 to +1 transition
has time to go through 0) and lowers the bandwidth requirement. I am no
great theoretician but it strikes me that this would work on radio too.

Bob (or anyone else), is there an obvious flaw in this scheme? AMI seems
so easy to do, compared to so many other schemes out there, and -- at least
if you apply standard "B8ZS" or "HDB3" run length limited zero substitution --
it should be pretty easy to fit into the audio spectrum of an unmodified
FM radio. Comments?

Fred R. Goldstein k1io goldstein@carafe.tay2.dec.com

Opinions are mine alone; sharing requires permission

541. Re: AX.25 protocol with Linux?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-10 07:46:39 UTC
From: terryd@extro.ucc.su.OZ.AU
Message-ID: <terryd.750239199@extro.ucc.su.OZ.AU>
Source record: 51330

riku@juha.fi (Riku Kalinen) writes:

>Does there exist any support for AX.25 packet radio protocol in Linux?

>(Linux is freely-available x86 (x >= 3) *nix - lookalike.)

>Is this support in the form of add-on or what?

>If there is support for AX.25, what is the needed hardware?

Hello Riku,
If you can wait just a short while, the in-kernel ax.25 code
should be ready.

All you will need is a tnc capable of kiss operation initially.

Terry

--
--- Terry Dawson, terryd@extro.ucc.su.oz.au

542. Re: Public Apology

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-10 10:24:06 UTC
From: dave@llondel.demon.co.uk
Message-ID: <750273846snx@llondel.demon.co.uk>
Source record: 51332

Depending on whether I calmed down before I finished typing, I would put the guy in my reject file and never handle anything of his again. If I calmed down enough I would just put him on hold.

Sending stuff via packet is a priviledge, not a right, so he is well out of order.

Dave
--

****
* G4WRW @ GB7WRW.#41.GBR.EU AX25 * Start at the beginning. Go on *
* dave@llondel.demon.co.uk Internet * until the end. Then stop. *
* g4wrw@g4wrw.ampr.org Amprnet * (the king to the white rabbit) *
****

543. Re: AX.25 protocol with Linux?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-10 11:57:23 UTC
From: luru@stekt6.oulu.fi
Message-ID: <LURU.93Oct10135724@stekt6.oulu.fi>
Source record: 51331

In article <terryd.750239199@extro.ucc.su.OZ.AU> terryd@extro.ucc.su.OZ.AU (Terry Dawson) writes:

> riku@juha.fi (Riku Kalinen) writes:
> >Does there exist any support for AX.25 packet radio protocol in Linux?

> If you can wait just a short while, the in-kernel ax.25 code
> should be ready.

> All you will need is a tnc capable of kiss operation initially.

Sounds cool. I wonder if anyone is working with the Ottawa PI board driver yet?

Luru

544. Z-80B CPU and SIO/0 Source?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-10 14:35:50 UTC
From: jcox@lakes.trenton.sc.us
Message-ID: <F3k8ac1w165w@lakes.trenton.sc.us>
Source record: 51334

I'm in the process of upgrading an MFJ-1274 TNC to run TheNet X1J. In order to switch to the higher speed clock (4.9 MHz), I understand that I need to install a "B" series (6Mhz) Z-80 CPU and SIO/0 chip. I have found several sources (JDR, Jameco, etc) for the CPU chip, but have yet to find one for the SIO/0 chip. Any suggestions out there?

73, John

545. Re: Public Apology

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-10 16:27:25 UTC
From: eeyimkn@unicorn.nott.ac.uk
Message-ID: <299d5d$evr@unicorn.ccc.nottingham.ac.uk>
Source record: 51333

Jeesus, what a loser. Packet BBS's (PBBS = Packet, not public :-)) are run over here at least under the total authority of the sysop involved - the sysop has the absolute final say over whether a message can sit on his hard disk or not. This is in a way a kind of symptom of what's wrong with the network - this jerk thinks he can threaten to sue someone for not carrying one of his messages, when in actual fact as the originator he has no legal rights AT ALL concerning where his message can go. People are beginning to take the system for granted and assume that they can do anything they want.

Grr. This has put me in a bad mood now - howsabout locking this guy out of the entire network? *grin*

73 Mike
(off to punch a sack of potatos for half an hour to stop feeling quite so livid)

--
+--------------------------- O Mike Knell, University of Nottingham, UK -+
| Nevertheless.. -/ \- Internet: eeyimkn@unicorn.nott.ac.uk |
| the Turtle Moves! -_/- AX25: g7gpa@gb7bad.#23.gbr.eu |
+--M.T.V. - GET OFF THE AIR!-- | AMPRnet: mpk@hobbes.g7gpa.ampr.org -------+

546. Re: Public Apology

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-10 16:58:46 UTC
From: jim@n5ial.mythical.com
Message-ID: <1993Oct10.165846.2251@n5ial.mythical.com>
Source record: 51338

Question---the messages that started all this weren't, by any chance,
originally dated 1 April, were they? That's about the only way they could
even begin to be taken seriously...as a good April Fool's prank. :-)

In article <CEKy1n.Cvr@hawnews.watson.ibm.com> kf5mg@vnet.ibm.com
(Jack Snodgrass) writes:

>What follows is the text of the Apology and the message that
>triggered it. The message is a hoot. I moved the SMTP headers
>to the bottom of the note for viewing. The rest of the note is
>'as is'.

You're right---the message that triggered the apology is funny. To think
that the author actually believes that the sysop of a packet BBS is ``in
serious violation of the law by killing my message if you operate a PBBS''
is truly funny. Such stupidity.....makes you wonder how the guy managed
to get a license, doesn't it?

I almost wish I'd been the sysop in question...let the guy try to get me in
court...see who comes out of it with their nose bloodied (won't be me). :-)

If it's *MY* license associated with the packet BBS (and therefore, my
license that's at stake if the FCC doesn't like some message's content),
I alone will be the judge of whether or not something gets transmitted.
If someone doesn't like that, they are free to route it a different way.
As most of us all realize, packet BBS systems are a *LOT* different than
landline BBSs, and an entirely different set of rules apply (e.g., if the
sysop on a BBS or public access system I was using were monitoring my
e-mail, and I found out about it, I'd be mad as hell...but this is
basically required on packet BBSs, due to the current FCC regs, and I
wouldn't think twice about it, and would, in fact, expect it).

>>>``PBBS (PUBLIC BBS -- with the accentuation on the word PUBLIC!).

Hmmmm...I've never heard a packet BBS called a Public BBS before. :-)

>>>seen around the country soon, then your name WILL appear in QST as another
>>>loser, and you WILL lose your license, and you WILL pay a stiff fine. Go
>>>ahead, don't take me seriously. Go ahead, MAKE MY DAY!

Can you say, ``idle threats'' ??? I knew you could.....

Later,
--jim

--
#include <std_disclaimer.h> 73 DE N5IAL (/4)
-------------------------< Running Linux 0.99 PL10 >--------------------------

INTERNET: jim@n5ial.mythical.com | j.graham@ieee.org ICBM: 30.23N 86.32W
AMATEUR RADIO: (packet station temporarily offline) AMTOR SELCAL: NIAL

E-mail me for information about KAMterm (host mode for Kantronics TNCs).

547. Re: Soundblaster (tm) for multi-mode digital communications

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-10 18:56:04 UTC
From: david@djwhome.demon.co.uk
Message-ID: <750304564snx@djwhome.demon.co.uk>
Source record: 51335

In article <1993Oct4.202127.2001@ualr.edu> bross@quapaw.astate.edu (Brian Ross) writes:
>
>: The original [FFTMORSE] has problems with
>: SB Pros (I could post my fix for it on the condition that I get feedback on
>: whether it works - it reportedly does not always do so).
>
Here is part of a posting originally made to CompuServe, by me:

<<<<<<<
If you have tried to use the FFTMORSE program by Francois Jalbert on a Sound Blaster Pro, you may be interested in the following procedure which makes it work for me on a Pro 2. I would like to know if you succeed or fail using it, as the original author tried changing the source in a similar way and sending it to someone who failed to use it on a Sound Blaster Pro before; it did not work for them.

The procedure is to run debug with the following input (which may be taken from a file with <):

```
g 2a
t
g 155
t
a 1822
nop
----- this line is blank!
g
q
```

This works with the 1st May 1992 version of the binary. The "g 2a; t" sequence gets through the code which moves the lzexe decompressor out of the way of the program. The "g 155; t" sequence gets to the end of the decompressor. In both cases the t steps through an instruction which changes the code segment. The "a 1822; nop" sequence patches out the OUT instruction which writes a speaker on command to the Sound Blaster.

Note that the program ceases to respond to the keyboard if you use control-C or control-BREAK; this is not a hardware compatibility problem. ESC is the approved method of terminating it.
>>>>>>>

If you have the right compilers and libraries, you can just remove the speaker on-call.

Note that the program only really works on clean signals. I have adapted it for GCC, and have been trying to improve it, but my current version is

still very half baked.

>I have a Pro Audio Spectrum 16 and a 486/33, and I can't get this program to
>work. I also can't get a program called DTMF that is supposed to decode
>DTMF tones to work. (it was based on FFTMORSE) I tried it on a friend's
>computer (he has a 486/25 and a SB 1.0) and it wouldn't work either.
>The docs say that it uses the clock on the SB for timing, so I guess the
>speed of the computer wouldn't affect it that much.

I haven't tried this, so I can't say much about it. FFTMORSE doesn't use
the SB for timing, except in as much as it samples no faster that the
fastest sampling rate. Incidentally, it needs a dedicated machine to get
reasonable timing. It is possible that a really fast machine might
violate some of the settling time constraints on the SB, but that doesn't
seem to have been my problem.
--
David Woolley, London, England david@djwhome.demon.co.uk

548. Re: Z-80B CPU and SIO/0 Source?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-10 21:02:23 UTC
From: dave@llondel.demon.co.uk
Message-ID: <750312143snx@llondel.demon.co.uk>
Source record: 51339

In article <F3k8ac1w165w@lakes.trenton.sc.us> jcox@lakes.trenton.sc.us (John Cox) writes:
>
>I'm in the process of upgrading an MFJ-1274 TNC to run TheNet X1J. In
>order to switch to the higher speed clock (4.9 MHz), I understand that I
>need to install a "B" series (6Mhz) Z-80 CPU and SIO/0 chip. I have
>found several sources (JDR, Jameco, etc) for the CPU chip, but have yet
>to find one for the SIO/0 chip. Any suggestions out there?
>
If you have 'A' versions, try those at the higher speed... you may well
find that they work. If you are putting the TNC on a remote site then get
the 'B' version though, cos otherwise, by Murphy's Law, it will go wrong at
the most inconvenient time.

Dave
--

* G4WRW @ GB7WRW.#41.GBR.EU AX25 * Start at the beginning. Go on *
* dave@llondel.demon.co.uk Internet * until the end. Then stop. *
* g4wrw@g4wrw.ampr.org Amprnet * (the king to the white rabbit) *

549. Re: re: Public Apology - get real!

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-11 00:03:18 UTC
From: MARK@ardsley.business.uwo.ca
Message-ID: <MARK.489.2CB8A2C6@ardsley.business.uwo.ca>
Source record: 51336

> I am, at this very
>moment, consulting with my attorney about ways to prosecute you. Even IF i

>You, my friend, have made a grave error. You stand to lose considerably. If
>possible, I intend to have your liscense over this issue. If you think I'm
>just blowing steam, please think about how long it has taken me to reply to
>your message -- obviously a lot of thought and work has gone into the project.
> You, sir, will be off the air FOREVER! Now, how do you feel? Do you want
>to delete any more of my messages? Your liscense is mine!

With atitudes like this, and random tourist shootings, its no wonder the US
has a bad rap with the world in general.

ps: I do believe the 'p' in pbbs is 'packet' NOT 'public'.

Too bad these guys have the ability to spread their ideas world-wide via
shortwave.

Proud to be Canadian!

=-=
Mark Bramwell, VE3PZR Located in sunny London, Ontario

Internet: Mark@ARDSLEY.business.uwo.ca IP Address: 129.100.22.33
Packet: VE3PZR @ VE3GYQ UWO Phone: (519) 661-3714

550. Re: Public Apology - get real!

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-11 01:28:30 UTC
From: drenze@icaen.uiowa.edu
Message-ID: <1993Oct11.012830.6220@news.uiowa.edu>
Source record: 51337

MARK@ardsley.business.uwo.ca (Mark_Bramwell) writes:
[quoting the idiot who started the whole thing in the first place]
>> I am, at this very
>>moment, consulting with my attorney about ways to prosecute you. Even IF i

>>You, my friend, have made a grave error. You stand to lose considerably. If
>>possible, I intend to have your liscense over this issue. If you think I'm
>>just blowing steam, please think about how long it has taken me to reply to
>>your message -- obviously a lot of thought and work has gone into the project.
>> You, sir, will be off the air FOREVER! Now, how do you feel? Do you want
>>to delete any more of my messages? Your liscense is mine!

>ps: I do believe the 'p' in pbbs is 'packet' NOT 'public'.

Ayup...not to mention that, in the US, even the owner of a landline bbs has
the right to review any and all messages/files posted to his board and delete
those which he feels are inappropriate. Read the Electronic Privacy Act.
...many BBS's post the relevant portions as a login screen for new users.
After all, if something illegal is suspected of being posted on
a BBS, it's the operator's machines which are confiscated, not the poster's!
Just ask Steve Jackson Games about this one.

73, Doug

--
__ /| | Douglas J Renze, N0YVW |
\'o.O' | +1 319 337 4664 | In God We Trust:
=(___)= | drenze@icaen.uiowa.edu | All Others Pay Cash
U | Douglas-Renze@uiowa.edu |

551. Re: Public Apology

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-11 06:54:58 UTC
From: ai389@Freenet.carleton.ca
Message-ID: <CEq0JM.3uy@freenet.carleton.ca>
Source record: 51340

Having read the complainants demand for an apology, I can`t escpe the feeling that we`re all being had......he must have had his tongue firmly stuck in his cheek.

--
_____ | RR 3 Almonte On Canada K0A 1A0. 613-256-3865
Tim Ray | AMPRnet: ve3xv.ampr.org[44.135.96.80]
_____ | HAM BBS: VE3XV@VE3OSQ.#EON.CA.NA
| internet (e-mail): ai389@Freenet.carleton.ca

552. Re: re: Public Apology

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-11 14:22:22 UTC
From: jbloom@arrl.org
Message-ID: <2431@arrl.org>
Source record: 51341

In rec.radio.amateur.digital.misc, kf5mg@vnet.ibm.com (Jack Snodgrass) writes:

[deleted relayed packet message from individual so clueless as to think
he can sue someone for not relaying his packet message, and who apparently
has an attorney who knows a fish when he sees one; also deleted response
from SYSOP with stuck caps-lock key.]

Thanks for the update, Jack. Now I remember why I quit checking into the
local PBBS. It's interesting to see that the intellectual level of PBBS
traffic hasn't risen any.

Jon Bloom, KE3Z | jbloom@arrl.org
American Radio Relay League |
225 Main St., Newington CT 06111 |

553. Re: Public Apology

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-11 15:02:31 UTC
From: ka6etb@GRAFex.sbay.org
Message-ID: <wyg0ac17w165w@GRAFex.sbay.org>
Source record: 51353

jim@n5ial.mythical.com (Jim Graham) writes:

> >>>seen around the country soon, then your name WILL appear in QST as another
> >>>loser, and you WILL lose your license, and you WILL pay a stiff fine. Go
> >>>ahead, don't take me seriously. Go ahead, MAKE MY DAY!
>
> Can you say, ``idle threats'' ??? I knew you could.....

If it is not an idle threat, the guy is in for a serious attitude adjustment.
That is, if he can find someone to plead his case.

ETB

554. Re: re: Public Apology

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-11 16:41:38 UTC
From: sfarlow@NeoSoft.com
Message-ID: <CEqrpH.83v@sugar.NeoSoft.COM>
Source record: 51345

AGAIN, amateur radio is a HOBBY and is VOLUNTEER. As such, anyone wh
CHOOSES to run a PBBS has full rights to control what leaves his PBBS
or gets posted there.That goofy lawyer and the guy who hired him ought
to apologize to that SYSOP for their behavior.
o

555. Re: Dataengine Mod Wanted

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-11 17:33:20 UTC
From: hanko@wv.mentorg.com
Message-ID: <1993Oct11.173320.1940@news.mentorg.com>
Source record: 51342

Please post - probably a lot of us interested in this one!

... Hank

In article <60.1009.5731.0N185C22@canrem.com>, steve.jones@canrem.com (Steve Jones)
writes:
|> Can anyone E-mail me the mod that allows the Dataengine to do 19k2 with an
|> open squelch without generating a mess of interrupts? I seem to recall
|> this would also fix the garbage calls in the mheard list. We're running
|> some Dataengines at 19k2 and notice alot of CRC errors. We assume that this
|> is due to the Dataengine 'falsing' on the open squelch noise.
|> Thanks in advance,
|>
|> Steve Jones <steve.jones@canrem.com>
|>
|> -----BEGIN PGP PUBLIC KEY BLOCK-----
|> Version: 2.3a
|>
|> mQA9AiyznJYAAAEBgLo58lXwene0xZytrUzarHz0d6AUPmaWnI0udeHtwZlTvKlq
|> ZVTimEYShF10BcGHzQAFEbQkU3RldmUgSm9uZXMgPHN0ZXZlLmpvbmVzQGNhbnJl
|> bS5jb20+
|> =nIy/
|> -----END PGP PUBLIC KEY BLOCK-----
|>
|> * Q-Blue v0.7 [NR] *

--

Hank Oredson @ Mentor Graphics
Internet : hank_oredson@mentorg.com
Amateur Radio: W0RLI@W0RLI.OR.USA.NA

556. Re: Public Apology

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-11 17:36:43 UTC
From: hanko@wv.mentorg.com
Message-ID: <1993Oct11.173643.2017@news.mentorg.com>
Source record: 51343

Now now ... careful!

The SPCP (Society for the Prevention of Cruelty to Potatoes)
will be after you if you are not careful !

... Hank

In article <299d5d$evr@unicorn.ccc.nottingham.ac.uk>, eeyimkn@unicorn.nott.ac.uk (M.
Knell) writes:
|> Jeesus, what a loser. Packet BBS's (PBBS = Packet, not public :-)) are run
|> over here at least under the total authority of the sysop involved - the sysop
|> has the absolute final say over whether a message can sit on his hard disk or
|> not. This is in a way a kind of symptom of what's wrong with the network - this
|> jerk thinks he can threaten to sue someone for not carrying one of his
|> messages, when in actual fact as the originator he has no legal rights AT ALL
|> concerning where his message can go. People are beginning to take the system
|> for granted and assume that they can do anything they want.
|>
|> Grr. This has put me in a bad mood now - howsabout locking this guy out of the
|> entire network? *grin*
|>
|> 73 Mike
|> (off to punch a sack of potatos for half an hour to stop feeling quite so
|> livid)
|>
|>
|> --
|> +--------------------------- O Mike Knell, University of Nottingham, UK -+
|> | Nevertheless.. -/ \- Internet: eeyimkn@unicorn.nott.ac.uk |
|> | the Turtle Moves! -_/- AX25: g7gpa@gb7bad.#23.gbr.eu |
|> +--M.T.V. - GET OFF THE AIR!-- | AMPRnet: mpk@hobbes.g7gpa.ampr.org -------+

--

Hank Oredson @ Mentor Graphics
Internet : hank_oredson@mentorg.com
Amateur Radio: W0RLI@W0RLI.OR.USA.NA

557. Re: re: Public Apology - get real!

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-11 17:41:22 UTC
From: hanko@wv.mentorg.com
Message-ID: <1993Oct11.174122.2193@news.mentorg.com>
Source record: 51344

Just a comment on use of PBBS - back in the "old days" circa 1984,
PBBS meant "Personal BBS" - i.e. one user. Changed to "Packet BBS"
perhaps sometime in the 1987 time frame. The lingo changes so fast
it's hard to keep up ! Now maybe it will mean "Public BBS" <har har>.

... Hank

In article <MARK.489.2CB8A2C6@ardsley.business.uwo.ca>, MARK@ardsley.business.uwo.ca
(Mark_Bramwell) writes:
|> > I am, at this very
|> >moment, consulting with my attorney about ways to prosecute you. Even IF i
|>
|> >You, my friend, have made a grave error. You stand to lose considerably. If
|> >possible, I intend to have your liscense over this issue. If you think I'm
|> >just blowing steam, please think about how long it has taken me to reply to
|> >your message -- obviously a lot of thought and work has gone into the project.
|> > You, sir, will be off the air FOREVER! Now, how do you feel? Do you want
|> >to delete any more of my messages? Your liscense is mine!
|>
|>
|> With atitudes like this, and random tourist shootings, its no wonder the US
|> has a bad rap with the world in general.
|>
|> ps: I do believe the 'p' in pbbs is 'packet' NOT 'public'.
|>
|>
|> Too bad these guys have the ability to spread their ideas world-wide via
|> shortwave.
|>
|> Proud to be Canadian!
|>
|> =-=
|> Mark Bramwell, VE3PZR Located in sunny London, Ontario
|>
|> Internet: Mark@ARDSLEY.business.uwo.ca IP Address: 129.100.22.33
|> Packet: VE3PZR @ VE3GYQ UWO Phone: (519) 661-3714

--

Hank Oredson @ Mentor Graphics
Internet : hank_oredson@mentorg.com
Amateur Radio: W0RLI@W0RLI.OR.USA.NA

558. Dual plug

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-11 18:20:37 UTC
From: kharker@bnr.ca
Message-ID: <29c85l$qkl@crchh941.bnr.ca>
Source record: 51346
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.digital.misc

me explain. Eventually, I am going to be building a new cable to go from the back of my tnc and into the top of my present or future ht. The connector on the tnc end of things is a simple DB-9, so that's not a problem. What I am wondering about is the ht end. I am only going to have one vhf radio for quite a while, so my ht will have to serve as my packet station, my mobile voice station, and my base voice station. I will therefore need to be plugging and unplugging this future cable quite a bit. The top of almost all ht's (mine included) have two plugs - a min and sub-mini - for speaker and mic respectively. As far as I can tell, all ht's use the same spacing between these two plugs as well.
Now, this may seem like a pretty silly problem, and it may even boil down to just a matter of aesthetics. I would like to just plug in and pull out a single plug rather than two. I would like the cable to have one and only one connector on each end, rather than one connector on the tnc end and two connnectors on the ht end. I've given up on trying to find a source that makes the mini-and-sub-mini-plugs-in-one connector (although I have seen it on enough remote speaker mics and MFJ's pre-fab packet cables to have held out hope...), so I am wondering if anyone else has tried to build some sort of casing to hold the two plugs in their appropriate seperation, and is sturdy enough to allow for a lot of plugging and unplugging. Perhaps using heat shrink tubing? Nylon wire ties? Cutting open a stereo headphone Y connector and gluing it back together with cryocanalate (sp?) glue?
Or, alternatively, does anyone have a damaged, destroyed, mutilated, or otherwise useless ht speaker mic with the mini-and-sub-mini-plugs-in-one connector on it that they'd be willing to donate/sell to me so I could try and use that connector?

Any ideas on this are appreciated.

_ken/n1pvb

--
==
Kenneth E. Harker Bell Northern Research "Any opinions expressed
kharker@bnr.ca Richardson, Texas, USA are solely mine and do
N1PVB (214) 684-5115 not represent BNR"
==

559. Re: DVR4-10's @ 450mhz

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-11 18:39:17 UTC
From: jra@lawdept.daytonoh.ncr.com
Message-ID: <jra.11.000DA80F@lawdept.daytonoh.ncr.com>
Source record: 51349

In article <294h98INN72s@gap.caltech.edu> pjb@cco.caltech.edu (Paul J. Brewer) writes:

>A few of us in southern california are using them on 439.025 mhz with
>no problems, at 9600 bd.

>Thats not 450, but its halfway there. Wonder why they made these things
>for 431? Did it save um any money? Anyone got the scoop on this?

What passes for a bandplan on 70cm sets up 430.0 to 431.0 for 100kHz wide data channels (on .05 MHz centers). 19.2kB needs more than an NBFM bandwidth, so the D4-10 was targeted to use those channels.

Of course, in some areas ATV activity at a video carrier of 426.75 is enough to cause problems in the 430-431 range...

John AG9V

560. Re: Dataengine Mod Wanted

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-11 18:52:28 UTC
From: jra@lawdept.daytonoh.ncr.com
Message-ID: <jra.12.000DE052@lawdept.daytonoh.ncr.com>
Source record: 51350

In article <60.1009.5731.0N185C22@canrem.com> steve.jones@canrem.com (Steve Jones) writes:

>Can anyone E-mail me the mod that allows the Dataengine to do 19k2 with an
>open squelch without generating a mess of interrupts? I seem to recall
>this would also fix the garbage calls in the mheard list. We're running
>some Dataengines at 19k2 and notice alot of CRC errors. We assume that this
>is due to the Dataengine 'falsing' on the open squelch noise.
>Thanks in advance,

I don't have a specific mod for the DataEngine handy, but anything that will gate the RXD signal with DCD will work.

If you're using the D4-10 radios, a simple fix is to put a diode from pin 2 of U1 in the radio to pin 2 of the TTL level DB9. Point the cathode at U1. The two points are close to each other on the circuit board, and the diode can be tacked onto the bottom of the board.

This will apply a positive voltage to the data slicer reference input when no signal is present, effectively clamping the RXD output. When the squelch opens up, the DCD line goes low. The data slicer is now unclamped and can generate RXD based on a real signal (the diode prevents the DCD line from sinking the slicer reference to ground when DCD goes low).

It's a brute force method, but it works.

73,
John AG9V

561. Re: Public Apology

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-11 19:25:00 UTC
From: ap_v132@dcs.king.ac.uk
Message-ID: <29cbuc$7d@mercury.king.ac.uk>
Source record: 51347

I have just finished reading the message which prompted this 'formal apology'. I wish I had packet access at the mo' so I could tell the guy JUST what I think! Unbelievable that people really think they can get away with making threats like that! Is it possible to sent 200KVolts wrapped up in a packet?

-Niall

--========--
Niall Pagdin, Student Advisory (SC), Kingston University,
Kingston-upon-Thames, London, England.
E~Mail: niall@crystal.king.ac.uk

- G7PDX -

"Only those who attempt the absurd, achieve the impossible!"

562. Getting into Packet without a TNC

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-11 19:32:00 UTC
From: ap_v132@dcs.king.ac.uk
Message-ID: <29ccbg$7d@mercury.king.ac.uk>
Source record: 51348

Excuse me if I seem ill-informed but that is exactly what I am. I am interested in getting into packet but only know what I have read in a short booklet on the subject. One thing I did pick up though, was that it is possible to get programs for a PC to do all the work usually done by the TNC. Would anyone know where I could get hold of such a program? (Source code in 'c' would be even better.)

Thanks in advance,

-Niall

--=******=--
Niall Pagdin, Student Advisory (SC), Kingston University,
Kingston-upon-Thames, London, England.
E~Mail: niall@crystal.king.ac.uk

- G7 PDX -

"Only those who attempt the absurd, achieve the impossible!"

563. Re: info on cellular mods - illegal?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-11 20:50:19 UTC
From: henniger@Metaphor.COM
Message-ID: <3389@cronos.metaphor.com>
Source record: 51351

```
In article <29440u$1qi@hp-col.col.hp.com>, jms@col.hp.com (Mike Stansberry) writes:
|> Steve Brown (sbrown@charon.dseg.ti.com) wrote:
|> : In article <MARK.487.2CB48F52@ardsley.business.uwo.ca>
|> : MARK@ardsley.business.uwo.ca (Mark_Bramwell) writes, commenting on
|> : a posting from Jack, kf5mg:
|>
|> : > In this case, the person is whining because the pbbs operator was unwilling
|> : > to have detailed information on how to perform an illegal act on his machine.
|>
|> : I thought I remembered something in Part 97 (U.S. Radio Law) to the
|> : effect that it was illegal for an amateur radio operator to engage in
|> : communications which supported illegal activities, however, I searched
|> : through my on-line copy of Part 97 this morning and couldn't find it.
|> : Prior to searching Part 97, I would have taken the position that the
|> : Packet BBS operator was not only well within his rights but also
|> : defending his license by killing the message containing instructions
|> : for perfroming an illegal act.
|>
|> : Am I dreaming that Part 97 previouly had such a prohibition in it?
|> : Or, maybe I just overlooked the prohibition still in Part 97.
|>
|> under part 97.113 Prohibited transmissions:
|>
|> (a) No amateur shall transmit:
|>
|> (4) Music using a phone emission except as specifically provided
|> elsewhere in this Section; communications intended to facilitate a
|> ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
|> criminal act;.........more stuff in this section (a)(4) not included.
|> ^^^^^^^^^^^^
|>
|> If a message is intended to help a person modify a scanner/radio to
|> receive cell phone conversations, which is unlawful (has been for
|> some time, but somewhat unenforceable, IMHO), then that message
|> (communication) is not allowed by FCC rules...
|>
|> You decide...
|> Mike, K0TER

The modification in question is to allow the radio to receive frequencies
which were originally designed in the radio. This is not illegal.

If the modification were to allow the radio to receive cellular communication,
this also would not be illegal, since it is not illegal to receive cellular
communication -- if you do not intend to listen to the conversation ( there is
```

more than just conversations going on in this frequency range.)

If the modified radio were used to listen to cellular conversations, and those involved in the conversation believed that the conversation was private, (i.e. at least one of them were not on a cellular phone) and the listener did not have permission to listen from those talking, then this act of listening would be illegal.

To say that it is illegal to pass information which, if used in a certain way would lead to acts which were illegal - is preposterous.

That is like saying that since cars which can drive over 65 MPH can be used illegally, possession of such a car should be illegal- or in this case - knowledge of how to obtain the car should be illegal to pass over the radio. Knowledge of how to obtain tires rated at over 165 MPH should be illegal to pass over the radio....

....BAN CORVETTES! BOYCOTT MICHELIN!....

My point is that it is absolutely not illegal under 97 to pass this info. Furthermore it is not illegal under the Privacy act of '86.

- summary:

1. if someone is passing information which MAY then allow them to more easily perform illegal acts then it is illegal to not censor it on your pbbs (i disagree)

2. if someone is passing information which WILL be used to perform illegal acts it is illegal to not censor it on your pbbs (i agree)

3. you have the right to censor whatever you want on your own pbbs (i agree)

Mick
(wb5von)

564. Re: Getting into Packet without a TNC

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-11 22:13:22 UTC
From: rich@mulvey.com
Message-ID: <1993Oct11.221322.5378@mulvey.com>
Source record: 51352

Niall Pagdin (ap_v132@dcs.king.ac.uk) wrote:
: Excuse me if I seem ill-informed but that is exactly what I am.
: I am interested in getting into packet but only know what I have read in
: a short booklet on the subject. One thing I did pick up though, was that
: it is possible to get programs for a PC to do all the work usually done
: by the TNC. Would anyone know where I could get hold of such a program?
: (Source code in 'c' would be even better.)

Well, you can set it up so that the PC does *most*, but not *all* of the work. You still need an interface to the xcvr, as PC's don't include the necessary hardware to perform the modulation/demodulation of the signals. The Baycom modem is the most popular in this class, it's basically a dongle that attaches to your serial port, while the TNC functionality is handled by software. Also, I understand that some people have used Soundblaster boards to the same effect. Just browse through any Amateur Radio mag, and you'll see ads for Baycom modems and the equivalent. Personally, I prefer to use a "real" TNC, since it can be used by any device that can talk via a serial port, which includes palmtop computers, Mac's, Next's, etc. Baycom-type modems are limited to whatever the software runs on. :-)

- Rich
--
Rich Mulvey Amateur Radio: N2VDS Rochester, NY
rich@mulvey.com "Ignorance should be painful."

565. Re: Public Apology

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-12 00:30:13 UTC
From: dave@esi.COM.AU
Message-ID: <4653@eram.esi.COM.AU>
Source record: 51355

So, who is this prawn, "Randy KF8TV @ W8HHF" ? Some wanna-be lawyer?
Are there any more like him over there?

--
Dave Horsfall (VK2KFU) VK2KFU @ VK2RWI.NSW.AUS.OC PGP 2.3
dave@esi.COM.AU ...munnari!esi.COM.AU!dave available

566. FM3 Data Transmission

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-12 01:10:16 UTC
From: dlane@weber.ucsd.edu
Message-ID: <29d05oINN1pn@network.ucsd.edu>
Source record: 51354
Cross-posted to: rec.radio.amateur.digital.misc,rec.video.satellite

Is anyone familiar with the FM3 method of data transmission? I have been told that this consists of placing an fsk signal on an fm 2 carrier...query: what type of equipment would be necessary for reception of such a signal (ie., demodulation and fsk decoding)?

Also anybody have info, sources of info for data reception information such as this? Please no suggestions of Hidden Signals by Harrington (I gave my copy to a local plebian on his way out of Rome)...I'd really appreciate any (!) sources of info pertinent to the twentieth century however 8-).

567. DJ_580 microphone connector

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-12 07:58:38 UTC
From: dbraun@ilx049.intel.com
Message-ID: <29do3e$1mlh@ilx018.intel.com>
Source record: 51356

Well, I got a DH-580 and I need to connect it to my TNC. From
the schematic, I understand how the PTT and audio go on the same
line. No problem there. BUT, the microphone socket is a (submini)
STEREO socket, where the middle terminal is is apparently supposed to
supply 5 volts power to an external speaker-mike. So, if I plug in
a regular mono submini plug, I will end up shorting this power
connecton to ground! (thru a 100-ohm resistor). If I used a stereo
submini plug, and left the middle terminal unconnected, everything
would be OK. But I haven't seen a stereo submini plug, just mono
ones.

What does everyone else do? Is there a source for stereo submini plugs?
Do you just use a mono one and not worry about the power connection?

Thanx,

Doug Braun Intel Israel, Ltd. M/S: IDC1-41
Tel: 011-972-4-655069 dbraun@inside.intel.com

568. Re: Public Apology

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-12 10:42:40 UTC
From: eeyimkn@unicorn.nott.ac.uk
Message-ID: <29e1n0$kum@unicorn.ccc.nottingham.ac.uk>
Source record: 51357

In article <4653@eram.esi.COM.AU> dave@esi.COM.AU (Dave Horsfall) writes:
>So, who is this prawn, "Randy KF8TV @ W8HHF" ? Some wanna-be lawyer?
>Are there any more like him over there?
>
Anybody feel like mailstorming him? But then again, maybe it's just not worth
loading the pacsats and HF gateways just for this bozo's sake..

73 Mike

--
+--------------------------- O Mike Knell, University of Nottingham, UK -+
| Nevertheless.. -/ \- Internet: eeyimkn@unicorn.nott.ac.uk |
| the Turtle Moves! -_/- AX25: g7gpa@gb7bad.#23.gbr.eu |
+--M.T.V. - GET OFF THE AIR!-- | AMPRnet: mpk@hobbes.g7gpa.ampr.org -------+

569. Call for info on Paccom TNCs

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-12 13:02:15 UTC
From: ken@boxhill.com
Message-ID: <29e9sn$326@boxhill.com>
Source record: 51360

If anyone out there can help with the following questions regarding Paccom TNC's, please do. If posting, the favor of a cc: to ken@boxhill.com is appreciated.

1. Does anyone have experience with the various flavors of Open Squelch DCD adapters for the Paccom Tiny2 Mark 2 and how well they operate? (I have this TNC, but without the O.S. DCD adapter)

2. Does anyone have a Paccom battery-operated (rechargeable) portable TNC which I believe is called the Handipacket, and would care to comment? (I dont have one but think I want one).

3. Does anyone have suggestions on the best way to obtain Paccom stuff? (I have been unable to find dealers, does anyone have experience with their direct sales?) (My Tiny-2 TNC was bought used...)

Thanks to anyone who can respond!

Ken Stamm N2TIA BBBB H H i ll ll
(ken@boxhill.com) B B H H l l
BoxHill Systems Corporation BBBB ooo x x HHHH ii l l
161 Avenue of the Americas B B o o x H H i l l
New York, NY 10013 BBBB ooo x x H H iii lll lll
Tel: (212)989-HILL (4455)
Fax: (212)989-6817 S y s t e m s C o r p o r a t i o n

570. QPSK MODEM problem ?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-12 14:43:13 UTC
From: g9066624@wumpus.cc.uow.edu.au
Message-ID: <29efq1$d57@wumpus.cc.uow.edu.au>
Source record: 51358

I am currently designing a digital QPSK modem, and have written a simulation in C.
I am incorporating algorithms that calculate timming recovery, phase estimation and frequency
offset estimation. My problem is that when I introduce a ramp frequency offset error, my modem
locks on to the ramp ok, but when the phase starts to converge to a constant value it becomes
unstable. I think my problem lies with my algorithm in calculating the phase when the phase has
moved into the next quadrant of the constaltion. Has anybody written any code which calculates
the frequency offset for a QPSK digital modem.

John katsoudas.....

571. Re: DJ_580 microphone connector

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-12 15:51:27 UTC
From: souza@wyvern.wyvern.com
Message-ID: <CEsK1s.L8H@wyvern.wyvern.com>
Source record: 51359

dbraun@ilx049.intel.com (Doug Braun) writes:

>Well, I got a DH-580 and I need to connect it to my TNC. From
>the schematic, I understand how the PTT and audio go on the same
>line. No problem there. BUT, the microphone socket is a (submini)
>STEREO socket, where the middle terminal is is apparently supposed to
>supply 5 volts power to an external speaker-mike. So, if I plug in

>What does everyone else do? Is there a source for stereo submini plugs?
>Do you just use a mono one and not worry about the power connection?

>Thanx,

>---
>Doug Braun Intel Israel, Ltd. M/S: IDC1-41
> Tel: 011-972-4-655069 dbraun@inside.intel.com

Try Mouser Electronics 1-800-346-6873. they have the item in stock.

--
==
Stephen Souza <souza@wyvern.wyvern.com>
WB1BUH@WD4MIZ.VA.USA

572. Re: Call for info on Paccom TNCs

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-12 18:51:17 UTC
From: Odysseus@vnet.IBM.COM
Message-ID: <19931012.115727.517@almaden.ibm.com>
Source record: 51361

In <29e9sn$326@boxhill.com> Ken Stamm writes:
>If anyone out there can help with the following questions regarding Paccom
>TNC's, please do. If posting, the favor of a cc: to ken@boxhill.com is
>appreciated.
>
>1. Does anyone have experience with the various flavors of Open Squelch
> DCD adapters for the Paccom Tiny2 Mark 2 and how well they operate?
> (I have this TNC, but without the O.S. DCD adapter)
>
> (Other questions deleted)
>
>Thanks to anyone who can respond!
>
>Ken Stamm N2TIA BBBB H H i ll ll
>(ken@boxhill.com) B B H H l l
>

Forwarding reply from someone who has used the board:
From: Thomas L. Ringate (K0ZXF@K0ZXF.#TPALAN.FL.USA.NA)
I can answer #1. I have the DCD board in all of the TNC's and they
are wonderful. They only work for 1200 baud with the installed
internal modem in the tiny2. If you go to 9600 that modem has it's
own state machine in it.
I use the DCD board that plugs directly into the chip socket. That is
because we have about 15 TNC's and I want them to be all the same.
With the DCD board, the tiny2 is very reliable on 1200 baud, and for
the $20 or whatever it is price, it's well worth it in my opinion.

Voice: (813) 878-5258 | | Advantis
Fax: (813) 878-5654 | Mail Drop | A Networking Technology Company
ODYSSEUS@VNET.IBM.COM | S408 | 3101 W. Dr. M. L. King, Jr., Blvd.
Amateur Radio: KE4CRB | | Tampa, Florida 33607 U. S. A.
----

573. Re: DJ_580 microphone connector

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-12 20:48:13 UTC
From: galen@picea.CFNR.ColoState.EDU
Message-ID: <Oct12.204813.94617@yuma.ACNS.ColoState.EDU>
Source record: 51362

In article <CEsK1s.L8H@wyvern.wyvern.com> souza@wyvern.wyvern.com (Stephen Souza) writes:
>dbraun@ilx049.intel.com (Doug Braun) writes:
>
>>Well, I got a DH-580 and I need to connect it to my TNC. From
>>the schematic, I understand how the PTT and audio go on the same
>>line. No problem there. BUT, the microphone socket is a (submini)
>>STEREO socket, where the middle terminal is is apparently supposed to
>>supply 5 volts power to an external speaker-mike. So, if I plug in
>>What does everyone else do? Is there a source for stereo submini plugs?
>>Do you just use a mono one and not worry about the power connection?
>>Thanx,
>>--
>>Doug Braun Intel Israel, Ltd. M/S: IDC1-41
>> Tel: 011-972-4-655069 dbraun@inside.intel.com
>
>Try Mouser Electronics 1-800-346-6873. they have the item in stock.
>Stephen Souza <souza@wyvern.wyvern.com>
> WB1BUH@WD4MIZ.VA.USA

Did you happen to notice the location or phone number? He's in ISRAEL,
and I don't think that Mouser is going to be the most economical choice.

Galen, KF0YJ

574. Re: info on cellular mods - illegal?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-12 23:00:38 UTC
From: mark@ve6mgs.ampr.org
Message-ID: <1993Oct12.230038.12126@ve6mgs.ampr.org>
Source record: 51366
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.scanner,rec.radio.amateur.policy

henniger@Metaphor.COM (Mickey Henniger) writes:

>If the modification were to allow the radio to receive cellular communication,
>this also would not be illegal, since it is not illegal to receive cellular
>communication -- if you do not intend to listen to the conversation (there is
>more than just conversations going on in this frequency range.)

Could someone please post to rec.radio.amateur.digital.misc,rec.radio.scanner,
rec.radio.amateur.policy and rec.radio.info (why not, I'l be pleased to pass
it), the text in the ECPA (or any subsequent laws regarding Cellular Privacy)
that talks about what limits are on the access to Cellular Frequencies,
modifications of radios, and the listening of the transmissions? Please, no
more flaming about whether the US has a right to legislate physics, the facts
are needed now!

Ciao -- 73 de VE6MGS/Mark -sk-
rec.radio.info submissions rec-radio-info@ve6mgs.ampr.ab.ca

575. Can I build TNC by myself?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-13 00:50:27 UTC
From: snabb@clinet.fi
Message-ID: <29fjcjINN7f9@clinet.fi>
Source record: 51364

I am interested in building a TNC by myself (not just the modem).
Does anyone know any sources for ready designed schematics & software?

--
Janne Snabb - snabb@clinet.fi - /S=snabb/O=CLINET/PRMD=INET/ADMD=FUMAIL/C=FI/

576. Macintosh & Packet: Need HELP!

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-13 00:53:24 UTC
From: fsrla@aurora.alaska.edu
Message-ID: <1993Oct12.165324.1@aurora.alaska.edu>
Source record: 51363

Hello, I'm new to this area and was wondering if
anyone could tell me what they think would be a
cheap, but affective Packet set-up for a Macintosh
running System 7. I don't see much talk about using
a Mac for packet, but it's the only computer in our
house.
Any help would be apriciated.....thanks!
ROG!
FSRLA@AURORA.ALASKA.EDU

577. TCP/IP starup cmds for MFJ TNC 2

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-13 03:57:32 UTC
From: arm@helix.nih.gov
Message-ID: <1993Oct13.035732.7624@alw.nih.gov>
Source record: 51365
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.packet

Quick question. I am setting up TCP/IP packet radio using a MFJ-1270B
(TNC 2). The ROM's must be up to date, because the modem recognizes
the KISS ON command. What is the series of commands the the MFJ needs
to properly initialize it for TCP/IP packet radio? I have been successful
bringing up a PK232 and PK88, because these manuals have the commands listed.
The MFJ manual I have apparently predates the use of KISS mode.

Thanks in advance.

--

Andrew Mitz, Biomedical Eng., Nationl Institutes | Opinions are mine alone
of Health Animal Center, Poolesville, MD | arm@helix.nih.gov
---

578. Making X1J(or whatever) go at 56 kbaud?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-13 06:51:24 UTC
From: ka7oei@uugate.wa7slg.ampr.ORG
Message-ID: <29334@uugate.wa7slg.ampr.org>
Source record: 51367

With a 10 MHz TNC2 running X1J (or something similar) will it crank at 56 kbaud? If not, how fast will it go?

The application is this: We are putting up a 56 kbaud repeater. Attached to this repeater will be a 9600 baud port and a 1200 baud port. The 56 kbaud data will simply be looped through, and when either the 9600 or the 1200 baud port is addressed in some way, packet will be routed through to it.

Other options would be to use a Data Engine, or a Gracilis Packeten. The only problem with a DataEngine would be that in our network there would be relatively few places (if any other) where it would "fit" and thus, it would be the only one. A P10 would be reasonable, but that would be down the road (we'd like to get it up and running before "then"...)

The 56 kbaud side (the TNC there) wouldn't really need to do routing, really, if it had enough "brains" to let the 1200 baud and 9600 baud TNC's do the work and simply "pass on" packets it knew to be for the two other ports.

If there isn't already a way to do this, there is certainly a need for it.

Thanks

<Clint>

579. Re: Making X1J(or whatever) go at 56 kbaud?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-13 09:38:13 UTC
From: dwp@fmg.bt.co.uk
Message-ID: <1993Oct13.093813.8821@srd.bt.co.uk>
Source record: 51368

ka7oei@uugate.wa7slg.ampr.ORG wrote:
: With a 10 MHz TNC2 running X1J (or something similar) will it crank at
: 56 kbaud? If not, how fast will it go?

A response from the author of X1J....

I do not know if it will work at 56K baud. The nearest trial I have seen
is that from G1PLT, who tried X1H. He connected a unit between two sun
workstations, clocked it at 10MHz and passed data at 38Kbaud. There are
two limiting factors :

1. The interrupt handler time (must be quicker than character separation)
2. The processing delay of the units.

Item 2 depends on its configuration. If you are hitting a slow node with
data from a link of that speed, you may well overload the slow node if you
node hop. It is essential that you run level 3 through the nodes or IP
route through the nodes to prevent this.

If you try it at 56K and it is not quite fast enough in operation, let me
know and I'll try to tweak a special version for you, but I think that speed
is pushing things a bit !.

You mention the data engine. I am about to start a port to the data engine
if you can wait a couple of months.

73's
Dave

Responses to G8KBB can be routed via me

David

580. Re: Macintosh & Packet: Need HELP!

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-13 10:37:16 UTC
From: "Terry M. Stader KA8SCP" <p00489@psilink.com>
Message-ID: <2959594393.0.p00489@psilink.com>
Source record: 51370

Rog,

Packeting on a Mac is not that much different than any other computer! You can use a good communications program like White Knight to access your TNC. With the many macros and other tools... you can even build a PBBS-type system for your personal mail!

There are also some very good packet programs as well... like Savant. Jim-KE0PH is here on the net and can offer some more info on it. I hear it is great... but me I am a TCPer... so I stay away from ax.25!

Under seperate cover I am sending you the list of Macintosh Amateur Radio Software that gets posted periodically on the net. It has lots of info in it that will help you out with Mac packeteering!

>DATE: Wed, 13 Oct 1993 00:53:24 GMT
>FROM: fsrla@aurora.alaska.edu
>
>Hello, I'm new to this area and was wondering if
>anyone could tell me what they think would be a
>cheap, but affective Packet set-up for a Macintosh
>running System 7. I don't see much talk about using
>a Mac for packet, but it's the only computer in our
>house.
>Any help would be apriciated.....thanks!
> ROG!
>FSRLA@AURORA.ALASKA.EDU
>

Terry M. Stader, KA8SCP, America Online (AOL) Ham Radio Club Host
Macintosh Amateur Radio Software List Maintainer
Internet: tstader@aol.com or p00489@psilink.com
Packet: KA8SCP@WA1PHY.#EMA.MA.USA.NOAM

581. Packet Standards

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-13 10:45:51 UTC
From: eeyimkn@unicorn.nott.ac.uk
Message-ID: <29gm8v$3e2@unicorn.ccc.nottingham.ac.uk>
Source record: 51369

(Copy to: tcp-group@ucsd.edu, rec.radio.amateur.digital.misc, AUTHOR@WW)

Hi people,
At the recent UK Sysop's meeting, it was decided that it was time to start working towards a unified system for the publication of the various standards used in packet. I, for my sins, have been given this job :-)

At the moment, it can be difficult or impossible to find those standards documents that do exist for packet radio, as they have either never been written or are tucked away on obscure FTP archives.. When a new software author wants to find out how the forwarding protocols work, and the real nitty-gritty such as "how many characters may a BID have?" it can be impossible to find out. It's a shame, as this will only breed lots of new mutually incompatible systems. We've seen the beginning of this already with the FBB/NNA forwarding thing, and the BID question provoked a huge flamewar recently on the UK network.. :-(

What I'd like to start is an RFC-like system for making sure that people publish their standards. The way it works is thus:
* Authors and other people developing new systems or protocols are encouraged to document them fully and send them in for adding to the standards library.
* New standards are numbered, a la RFC, and added to the archive for public access by anyone interested.
* When a standard is superseded or updated, a new document is published and the old one marked as superseded.
* Editorial control of documents remains with the authors.

Simple and hopefully effective. I know that there are standards written already for things like AX25, MBL forwarding, and the such, but for anything that there isn't one for, it would be kind of nice to get one written - any volunteers? Anybody with anything they've been hiding away which they've been meaning to release, also get in touch.. :-)
Note that virtually anything is acceptable, a few poems would go down just fine.. *grin*

We aren't going to be able to call them RFCs, as the Internet has them already, so a suitable acronym needs to be thought up. Let me know your ideas! A few to get started..
RFF - Request for Flames
RFHM - Request for Hate Mail
and so on..

The archive would be available by anonymous FTP (anyone got any spare space? Give me a shout.. :-)), and from packet BBSs by CLIVE server or REQFIL..

I think it's a great idea. A set of canonical documents for packet is long overdue.. Comments, suggestions, flames, welcome, to any of the addresses below...

73 Mike G7GPA
UK Packet Standards Coordinator

--
+--------------------------- O Mike Knell, University of Nottingham, UK -+
| Nevertheless.. -/ \- Internet: eeyimkn@unicorn.nott.ac.uk |
| the Turtle Moves! -_/- AX25: g7gpa@gb7bad.#23.gbr.eu |
+--M.T.V. - GET OFF THE AIR!-- | AMPRnet: mpk@hobbes.g7gpa.ampr.org -------+

582. Re: Call for info on Paccom TNCs

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-13 11:51:19 UTC
From: Aaron Wohl <aw0g+@andrew.cmu.edu>
Message-ID: <4giyire00WA141hUVx@andrew.cmu.edu>
Source record: 51371

1 - Paccom dcd is great. I use a micropower-2 with dcd and like it a lot. There
was a problem with the DCD adapter poping out of it's socket when knocked around
in airline bagage. But they changed that socket to a machine pin socket in current
production and fixed the problem. I put a dab of expoxy on mine.

2 I got a tour of paccom after the ARRL conference in Tampa and looked over a handipacket. It is nice and small. Take a look at the dimensions again and get an idea about the size. It is in an extruded aluminimum case. For something
that portable I would have prefered a front panel that was more water proof. They
have some dip switches accessable on the front panel to turn off the LEDs to conserve power. I seriously thought of getting one but already have too many TNCs...

3 I ordered all my stuff directly from Paccom. The shipping dates where wildly
wrong (they said today but it was three weeks and many phone calls later). They claim to have fixed the problem. Keep records of who you talk to, promised and actual ship dates. If you have any problems let the president of Paccom Gwenn Reedy (sp?) know with a letter. I think they are worth working
with.

There is a guy in NJ I think that sells Paccom and advertizes in the small print
in QST. Some of bbs operators around here buy from him and are happy.

583. Re: Public Apology

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-13 12:35:10 UTC
From: pcr@vnet.ibm.com
Message-ID: <CEu5Mn.F5p@hawnews.watson.ibm.com>
Source record: 51374

In <29e1n0$kum@unicorn.ccc.nottingham.ac.uk> eeyimkn@unicorn.nott.ac.uk (M. Knell) writes:
>In article <4653@eram.esi.COM.AU> dave@esi.COM.AU (Dave Horsfall) writes:
>>So, who is this prawn, "Randy KF8TV @ W8HHF" ? Some wanna-be lawyer?
>>Are there any more like him over there?
>>
>Anybody feel like mailstorming him? But then again, maybe it's just not worth
>loading the pacsats and HF gateways just for this bozo's sake..
>
>73 Mike
>

In a later packet message, KF8TV abjectly apologizes for his earlier
message. I don't know if he's BSing or what, but he *seems* to be sorry for
the threat of calling in the lawyers.

I was all set to flame him on packet, but I saw several messages in
response that were, while pointing out his problems, quite kind (especially
in comparison to the messages here).

I'd say, let's relax on this.

...phil
---
phillip c. reed
pcr@vnet.ibm.com / KD4PWI@N4YUU.CKY.KY.USA.NA / CI$:72754,513
* It is highly unlikely that the opinions expressed herein are those of IBM *
* or any of it's operating units. *

584. Has anyone put a "login:" on the air? (XENIX)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-13 12:54:41 UTC
From: lkollar@nyx.cs.du.edu
Message-ID: <1993Oct13.125441.2711@mnemosyne.cs.du.edu>
Source record: 51372

Soon and very soon -- perhaps by this weekend -- my house will once again proudly become a DOS-free zone as I replace DOS with XENIX on my system.

Just for grins, I'd like to hook up my TNC and provide full shell access over the air. However, I have reason to believe that it's not a simple matter of plugging in the TNC, setting up a getty, and watching the fun. (A friend of mine tried it on his system, and he had some trouble.)

Has anyone successfully done this, and if so, how?
--
Larry Kollar, KC4WZK | I like CW, but that doesn't mean I think every ham
lkollar@nyx.cs.du.edu | should have to learn it.
"You mean you came back from the dead, to tell me I'm *odd*?"

585. Re: Dual plug

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-13 14:47:29 UTC
From: PJC130@psuvm.psu.edu
Message-ID: <93286.104729PJC130@psuvm.psu.edu>
Source record: 51373
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.digital.misc

In article <29c85l$qkl@crchh941.bnr.ca>, kharker@bnr.ca (Kenneth E. Harker) says:
>
>...so I am wondering if anyone else has tried to build some sort of
>casing to hold the two plugs in their appropriate seperation, and is sturdy
>enough to allow for a lot of plugging and unplugging. Perhaps using heat k
>shrin
>tubing? Nylon wire ties? Cutting open a stereo headphone Y connector and
>gluing
>it back together with cryocanalate (sp?) glue?

I fabricated one using that clear plastic casting resin; it's basically clear epoxy. Be sure to use some sort of strain relief where the cable comes out of the epoxy block.

586. Re: info on cellular mods - illegal?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-13 15:29:56 UTC
From: bodoh@dgg.cr.usgs.gov
Message-ID: <1993Oct13.152956.28216@rsg1.er.usgs.gov>
Source record: 51377
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.scanner,rec.radio.amateur.policy

In article <1993Oct12.230038.12126@ve6mgs.ampr.org>, mark@ve6mgs.ampr.org (Mark G. Salyzyn) writes:
|>
|> Could someone please post to rec.radio.amateur.digital.misc,rec.radio.scanner,
|> rec.radio.amateur.policy and rec.radio.info (why not, I'l be pleased to pass
|> it), the text in the ECPA (or any subsequent laws regarding Cellular Privacy)
|> that talks about what limits are on the access to Cellular Frequencies,
|> modifications of radios, and the listening of the transmissions? Please, no
|> more flaming about whether the US has a right to legislate physics, the facts
|> are needed now!
|>
|> Ciao -- 73 de VE6MGS/Mark -sk-
|> rec.radio.info submissions rec-radio-info@ve6mgs.ampr.ab.ca

In a nutshell: The FCC ruling which was enacted to comply with the TDDRA makes it illegal to IMPORT or MANUFACTURE a scanning receiver with 4 or more memory channels which is capable of receiving or being EASILY modified to receive cellular communications as of 4/26/94.

Easily modifyable is defined as the addition or removal of a SIMPLE component such as a jumper, diode, resistor or chip - or the reprogramming of the receiver through keypad entry. It would SEEM to allow restoration by the addition or deletion of a COMPLEX component or SEVERAL components, but these wording loopholes would probably be slammed shut on the first manufacturer/imported who tries to use them. It would also seem to allow a non-scanning receiver which is easily modifyable to scan.

This ruling does not address double conversion receivers which can easily monitor cellular communications at +-21 MHz offset from the actual frequency. Although the ECPA made it illegal to monitor cellular no matter how you listened, the TDDRA would seem to allow double conversion scanners to be imported and manufactured. It is RUMOURED that Radio Shack will voluntarily stop selling any double conversion scanners that have 800 MHz capabilities - such as the PRO-39 and PRO-46. The TDDRA does not exempt amateur radio equipment - so expect to see firmware/CPU changes on VHF and UHF rigs that offer 800 MHz coverage.

The TDDRA also makes it illegal to IMPORT or MANUFACTURE frequency converters which may be used to monitor cellular communications as of 4/26/94.

This law does not make owning, buying, selling or modifying such a scanner illegal - we'll have to wait for the other shoe to drop.

The following text is from the FCC ruling known as the TDDRA or 'son-of-ECPA';

<ARTICLE>
Date="04/27/93"
Citation="58 FR 25574"
Group="commerce"
Type="RULE"
Department="FEDERAL COMMUNICATIONS COMMISSION"
Agency="FEDERAL COMMUNICATIONS COMMISSION"
Subject="Radio Scanners That Receive Cellular Telephone Transmissions"
<HEADER>
---

47 CFR Parts 2 and 15

[ET Docket No. 93-1; FCC 93-201]

Radio Scanners That Receive Cellular Telephone Transmissions

AGENCY: Federal Communications Commission.

ACTION: Final rule.
..

SUMMARY: This Report and Order implements new regulations that deny equipment authorization to radio scanners capable of receiving transmissions in the Domestic Public Cellular Radio Telecommunications Service. This action is taken in response to the Telephone Disclosure and Dispute Resolution Act. The intended effect of this action is to help ensure the privacy of cellular telephone conversations.

EFFECTIVE DATE: April 26, 1993.

FOR FURTHER INFORMATION CONTACT:

David Wilson, Office of Engineering and Technology, (202) 653-8138.

SUPPLEMENTARY INFORMATION: This is a summary of the Commission's Report and Order in ET Docket No. 93-1, FCC 93-201, adopted April 19, 1993, and released April 22, 1993. The full text of this decision is available for inspection and copying during normal business hours in the FCC Dockets Branch (Room 230), 1919 M Street, NW., Washington, DC. The complete text of this decision also may be purchased from the Commission's duplicating contractor, International Transcription Services at (202) 857-3800 or 2100 M Street, NW., suite 140, Washington, DC 20037.

Paperwork Reduction

The paperwork burden estimated in the Notice of Proposed Rule Making has been adjusted to reflect changes that are being adopted in this Report and Order. The adjusted paperwork burden is pending OMB approval.

Summary of the Report and Order

1. By this action, the Commission amends 47 CFR parts 2 and 15 to prohibit the manufacture and importation of radio scanners capable of receiving frequencies allocated to the Domestic Public Cellular Radio Telecommunications Service. This action implements statutory requirements set forth in the Telephone Disclosure and Dispute Resolution Act (TDDRA), Public Law 102-556. The rules being adopted are intended to increase the privacy protection of cellular telephone users without unduly restricting legitimate uses of scanners.

2. The Domestic Public Cellular Radio Telecommunications Service ("Cellular Radio Service") provides telephone service to mobile customers. Cellular telephones use frequencies in the bands 824-849 MHz and 869-894 MHz to connect their users to other cellular system users and to the Public Switched Telephone Network.

3. As defined within our rules, scanning receivers, or "scanners," are radio receivers that can automatically switch between four or more frequencies anywhere within the 30-960 MHz band. In order to control their potential to cause harmful interference to authorized radio communications, the rules require that scanners receive an equipment authorization (certification) from the Commission prior to marketing.

4. On October 28, 1992, the President signed the TDDRA into law. Section 403 of the TDDRA amends section 302 of the Communications Act of 1934 (47 U.S.C. 302(d)(1) and (2)) by requiring that by April 26, 1993 (180 days after enactment of the TDDRA), the Commission prescribe and make effective regulations denying equipment authorization for any scanning receiver that is capable of: (1) Receiving transmissions in the frequencies allocated to the domestic cellular radio service; (2) readily being altered by the user to receive transmissions in such frequencies; or, (3) being equipped with decoders that convert digital cellular transmissions to analog voice audio.

Further, section 302(d)(2), as amended by the TDDRA, provides that, beginning one year after the effective date of the regulations adopted pursuant to paragraph (d)(1), no receiver having such capabilities shall be manufactured in the United States or imported for use in the United States.

5. In accordance with the TDDRA, we adopted a Notice of Proposed Rule Making (Notice) proposing to deny equipment authorization to scanning receivers that: (1) Tune frequencies used by cellular telephones; (2) can be readily altered by the user to tune such frequencies; or (3) can be equipped with decoders that convert digital cellular transmissions to analog voice audio. See Notice of Proposed Rule Making in ET Docket No. 93-1, 59 FR 06769, February 2, 1993. The Notice requested comment on a proposed definition of "readily altered by the user." The Notice also proposed to deny equipment authorization (notification) to frequency converters that tune, or can be readily altered by the user to tune, cellular telephone frequencies. To assist us in determining compliance with these requirements, we proposed to require applicants

for certification of scanners, and for notification of frequency converters used with scanners, to include in their applications a statement stating that the device cannot be easily altered to enable a scanner to receive cellular transmissions.
6. Some 46 parties filed comments on the Notice and 6 parties filed reply comments. A large number of commenters, presumably most of them scanner enthusiasts, oppose adoption of any rules that would restrict the tuning capabilities of scanners. Manufacturers of scanners and cellular service providers in general support the Commission's proposed changes. However, several commenters ask for clarification or expansion of the rules.
7. In accordance with TDDRA, we are adopting new rules restricting scanners and associated frequency converters generally as proposed in the Notice. Based on the comments, we are adopting several minor changes to the rules as proposed.
8. The Final Regulatory Flexibility Analysis is contained in the text of the Notice.
9. The TDDRA requires that the rules adopted in this proceeding become effective on or before April 26, 1993. Accordingly, due to the limited time available to meet this requirement, we find good cause for the rules adopted herein to become effective upon publication in the Federal Register. See 5 U.S.C. 553(d).
10. Accordingly, It is ordered that under the authority contained in sections 4(i), 302 and 303 of the Communications Act of 1934, as amended, and the Telephone Disclosure and Dispute Resolution Act, 47 CFR parts 15 and 2 are amended as set forth below. These rules and regulations are effective upon publication in the Federal Register. It is further ordered that this proceeding is terminated.
11. For further information on this proceeding, contact David Wilson, Technical Standards Branch, Office of Engineering and Technology, at 202-653-8138.

List of Subjects in 47 CFR Parts 2 and 15

Communications equipment, wiretapping and electronic surveillance
Parts 2 and 15 of title 47 of the Code of Federal Regulations are amended as follows:

PART 2-FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS

1. The authority citation for 47 CFR part 2 continues to read as follows:

Authority: Sec. 4, 302, 303 and 307 of the Communications Act of 1934, as amended, 47 U.S.C. 154, 154(i), 302, 303, 303(r) and 307.

2. 47 CFR 2.975 is amended by adding a new paragraph (a)(8) to read as follows:

.2.975 Application for notification

(a) * * *
(8) Applications for the notification of receivers contained in frequency converters designed or marketed for use with scanning receivers shall include a statement describing the methods used to comply with the design requirements of .15.121(a) of this chapter or the marketing requirements of .15.121(b) of this chapter.
* * * * *
3. 47 CFR 2.1033 is amended by adding a new paragraph (b)(12) to read as follows:

.2.1033 Application for certification.
* * * * *
(b) * * *
(12) Applications for the certification of scanning receivers shall include a statement describing the methods used to comply with the design requirements of .15.121(a) of this chapter or the marketing requirements of .15.121(b) of this chapter.
* * * * *

PART 15-RADIO FREQUENCY DEVICES

1. The authority citation for 47 CFR part 15 continues to read as follows:

Authority: Sec. 4, 302, 303, 307 of the Communications Act of 1934, as amended, 47 U.S.C. 154, 302, 303 and 307.

2. 47 CFR 15.37 is amended by adding a last sentence to paragraph (b), and adding a new paragraph (f), to read as follows:

.15.37 Transition provisions for compliance with the rules.
* * * * *
(b) * * * In addition, receivers are subject to the provisions in paragraph (f) of this section.
* * * * *
(f) The manufacture or importation of scanning receivers, and frequency converters designed or marketed for use with scanning receivers, that do not comply with the provisions of .15.121 shall cease on or before April 26, 1994. Effective April 26, 1993, the Commission will not grant equipment authorization for receivers that do not comply with the provisions of .15.121 of this part. This paragraph does not prohibit the sale or use of authorized receivers manufactured in the United States, or imported into the United States, prior to April 26, 1994.
3. 47 CFR .15.121 is added to subpart B to read as follows:

.15.121 Scanning receivers and frequency converters designed or marketed for use with scanning receivers.

(a) Except as provided in paragraph (b) of this section, scanning receivers, and frequency converters designed or marketed

for use with scanning receivers, must be incapable of operating
(tuning), or readily being altered by the user to operate, within
the frequency bands allocated to the Domestic Public Cellular
Radio Telecommunications Service in part 22 of this Chapter
(cellular telephone bands). Receivers capable of "readily being
altered by the user" but are not limited to, those for which
the ability to receive transmissions in the cellular telephone
bands can be added by clipping the leads of, or installing,
a simple component such as a diode, resistor and/or jumper wire;
replacing a plug-in semiconductor chip; or programming a semiconductor
chip using special access codes or an external device, such
as a personal computer. Scanning receivers, and frequency converters
designed or marketed for use with scanning receivers, must also
be incapable of converting digital cellular transmissions to
analog voice audio.
(b) Scanning receivers, and frequency converters designed
or marketed for use with scanning receivers, that are manufactured
exclusively for, and marketed exclusively to, entities described
in 18 U.S.C. 2512(2) are not subject to the requirements of
paragraph (a) of this section.

Federal Communications Commission.

Donna R. Searcy,
Secretary.

[FR Doc. 93-9847 Filed 4-23-93; 10:58 am]
BILLING CODE 6712-01-M
</ARTICLE>

.
--
Keith McQueen, Wicat Systems Inc. , (801)224-6400 | My opinions are |
Packet: n7hmf @ nv7v.UT.USA.NA | all mine... |
Internet: keithm@wicat.com | ...so there! |

--
++
+ Tom Bodoh - Sr. systems software engineer, Hughes STX, N0YGT +
+ USGS/EROS Data Center, Sioux Falls, SD, USA 57198 (605) 594-6830 +
+ Internet; bodoh@dgg.cr.usgs.gov (152.61.192.66) +
+ "Welcome back my friends to the show that never ends!" EL&P +
++

587. Re: Packet Standards

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-13 16:43:33 UTC
From: enge@enge.almaden.ibm.com
Message-ID: <29hb7l$jbj@juniper.almaden.ibm.com>
Source record: 51375

The current holder of the BBS forwarding standard is Bob, N0ARY (bob@arasmith.com). You should coordinate your work with him. Of course, there are several authors who are ignoring the standards (see the great message number zero debate for example).

Roy Engehausen, AA4RE
enge@almaden.ibm.com

588. Multiple TNCs on same frequency

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-13 17:05:48 UTC
From: lawrence@combdyn.com
Message-ID: <1993Oct13.170548.5219@combdyn.com>
Source record: 51384

Is there anybody running more than one TNC on the same frequency at their QTH?

I'm running NOS, and I like it a lot. Now I've been asked about putting up a fuller Packet BBS.

Since I can't see anyway for the two packages to share the same TNC and radio, I was wondering if running two TNCs, two Radios, and two Antennas would work.. with both on the same frequency....or could two TNCs be wired to the same radio?

Having NOS and the BBS talk to each other over the air would probably be out of the question, aside from the fact that when one is talking the other is deaf (desensed).

I know that the main packet BBS in town ran on two separate frequencies, but it couldn't talk out on both at the same time.....It couldn't hear on the other frequency while talking on the other one either. At least it couldn't, now the radios are tuned tight enough that doesn't seem to be a problem anymore.

--
--EMAIL----------------------------PHONE-----------FAX------------
| WORK: lawrence@combdyn.com | (403)529-2162 | (403)529-2516 | CallSign
| HOME: dreamer@lhaven.uumh.ab.ca | (403)526-6019 | (403)529-5102 | VE6LKC
----
disclamer = (working_for && !representing) + (Combustion Dynamics Ltd.);

589. Re: Has anyone put a "login:" on the air? (XENIX)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-13 18:08:45 UTC
From: dbushong@wang.com
Message-ID: <CEuL2n.AG6@wang.com>
Source record: 51379

lkollar@nyx.cs.du.edu (Larry Kollar) writes:

>Soon and very soon -- perhaps by this weekend -- my house will once again
>proudly become a DOS-free zone as I replace DOS with XENIX on my system.

>Just for grins, I'd like to hook up my TNC and provide full shell access
>over the air. However, I have reason to believe that it's not a simple
>matter of plugging in the TNC, setting up a getty, and watching the fun.
>(A friend of mine tried it on his system, and he had some trouble.)

>Has anyone successfully done this, and if so, how?

I did this with xenix in '86 or so -- set the TNC to trans mode, and
disallow multiple connects (unless you want to modify getty() to
deal with the stream change).

It worked, but that time, there were so few people on packet, in New
Hampshire, who spoke *nix, that it just sat there IDing in morse code
all day. It was sort of like having the only walkie-talkie on the
block -- no one to talk to :(

Bottom line -- it should work fine for you, allowing for the usual
potential for bad stuff going out over the air under your callsign.
And the echo situation might be an issue, especially if there is a
slow throughput situation.

73,
Dave
--
Dave Bushong, Wang Laboratories, Inc. Amateur Radio Callsign KZ1O
Project Leader, Recognition products kz1o@n0ary.#noca.ca.na
Internet: dbushong@wang.com ARRL VE // W5YI VE

590. Packet BBS standards.

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-13 18:13:02 UTC
From: hanko@wv.mentorg.com
Message-ID: <1993Oct13.181302.432@news.mentorg.com>
Source record: 51376

Here is the BBS interface spec that has been in the works
for the past year. It is not "finished", but then again
it may never be "finished" ...

... Hank

BBS Interface Specification
Working Draft
9/28/93

Introduction
Section 1 - Establishing connection
Section 2 - Forwarding
Section 3 - Reverse forwarding
Section 4 - Forwarding to old BBSs
Section 5 - Error Conditions
Section 6 - BNF Summary
Section 7 - Feature Letter Use

Current mailing list
BBS_authors@arasmith.com

bob@arasmith.com (Bob Arasmith, N0ARY)
hanko@wv.MENTORG.COM (Hank Oredson, W0RLI)
wd6cmu@netcom.com (Eric Williams, WD6CMU)
enge@almaden.ibm.com (Roy Engehausen, AA4RE)
71151.720@CompuServe.COM (Victor Poor, W5SMM)
blloyd@axion.bt.co.uk (Brian Lloyd, G1NNA)
map@hopper.cba.csuohio.edu (Mike Pechura, WA8BXN)
durham@w2xo.pgh.pa.us (James Durham, W2XO)
johan@ece.orst.edu (Johannes Reinalda, WG7J)
trentin@enac.dgac.fr (to J-P Roubelat, F6FBB)
sproul@sproul.com (Mark Sproul, KB2ICI)
mike@km6px.arasmith.com (Mike Stickney, KM6PX)
70007.1365@compuserve.com (Ed Juge, W5TOO)
73126.3260@compuserve.com (Craig McCartney, WA8DRZ)

Via US Mail
Michael Jaggers, WB4TTZ
1377 Columbia Ave, Franklin, TN 37064

Introduction -
This document is meant to define the interaction between two BBSs
exchanging messages. It is not the goal of the document to specify
the interface of the future but merely represent what a BBS can be
expected to see at the current time.

It is hoped that this specification will be followed by another that defines the base rules for all BBS programs to adopt. This should eliminate the current problems with incompatibilities and overloaded operators. If you create a BBS to this specification you should be able to interconnect with virtually any BBS currently in use. Any extensions you add will put you at risk, the subsequent spec is to identify these areas.

In brief the following sequence of events takes place when the BBSs connect for forwarding:

```
Master System Slave System
------------ --------------
{Connect}
[SID]
N9ZZZ >

[SID]

>

SB ARES @ ALLCA < W7ZZZ $ARES0108

OK

message subject
message routing headers
message body
/EX

>

SB WANT @ ALLUS < W8AAA $1029_N0XYZ

NO
>

F>

SP WA2ABC @ N2AAA < N9AAA

OK

message subject
message routing headers
message body
/EX

F>

{Disconnect}
```

This represents a simple example of connecting, establishing a common protocol, forwarding and reverse forwarding. This document will look more closely at each of these phases.

In the text the BBS initiating the connect will be referred to as the MASTER and the remote BBS will be referred to as the SLAVE.

Each command and exchange will be presented in BNF (Backus-Naur Form) which is a context-free grammar widely used to describe computer language syntax.

All commands and fields are case insensitive.

Meta-syntactic information

[x] = Optional: zero or one x
(x y) = Grouping: treat multiple tokens as a single token
<> = Set

Characters:

NUL = <0x00>
CNTRL_C = <0x03>
TAB = <0x09>
CR = <0x0D>
LF = <0x0A>
CNTRL_Z = <0x1A>
SP = <0x20>

Character sets:

ALPHA = <'A'-'Z'>
DIGIT = <'0'-'9'>
ALNUM = ALPHA | DIGIT
ASCII = <0x20-0xFF>
SPACE = SP | TAB
8BIT = <0x01 - 0xff, except CR, LF, CTRL_C, CTRL_Z>

Character sequences:

EOL = CR | LF | CR LF

NUMBER = DIGIT | NUMBER DIGIT
WHITE = SPACE | WHITE SPACE

ASCII_STR = ASCII | ASCII_STR ASCII
ALNUM_STR = ALNUM | ALNUM_STR ALNUM
8BIT_STR = 8BIT | 8BIT_SRT 8BIT

Throughout this document we will present a verbose translation of the grammar highlighting any points that may not be obvious but could have significant affect. There will also be examples illustrating what can actually be expected.

Section 1 - Establishing connection

When connecting to a BBS the first line the BBS sends must be the SID (System IDentifier). The SID is used to determine what features are supported by BBS. The existence of the SID implies that the system supports reverse forwarding and OK/NO message rejection. There still

exist old BBS codes which do not present a SID at connect. Refer to
Section 4 for information on forwarding to these old style BBS sytems.

SID sent by both MASTER and SLAVE

AUTHOR_ID = <ASCII_STR, except '[', ']' and '-'>
AUTHOR_DATA = <ASCII_STR, except '[' and ']'>
FEATURE = ALPHA [DIGIT]
FEATURE_LIST = FEATURE | FEATURE_LIST FEATURE
SID = "[" AUTHOR_ID "-" [AUTHOR_DATA "-"] FEATURE_LIST [$]"]" EOL

The AUTHOR_ID and FEATURE_SET must be present. If the optional
AUTHOR_DATA is present it must be separated from the other two
fields by a '-'. AUTHOR_DATA may contain the '-' character.

The AUTHOR_ID and AUTHOR_DATA are typically a portion of the authors
callsign or BBS name and version number, respectively.

Each FEATURE consists of a letter, denoting the feature and an
optional number, denoting the feature level. The absence of a
version number implies version zero.

If BID's are supported, '$' must be the last symbol in the FEATURE_SET.

The recommended minimal support is BID and Hierarchical location
identifiers. These are necessary for the proper operation of the network.

EXAMPLE

[ZFJ-2.3-H$]

The original prompt received from the SLAVE BBS may contain additional
information intended for users. As soon as the SID is received by the
SLAVE BBS it should respond with an abbreviated PROMPT, with the
ASCII_STR field being empty.

Section 2 - Forwarding

A message can either be rejected or accepted by the SLAVE. There are
many reasons that the SLAVE my choose to reject a message but the most
common will be duplicate bid, indicating the SLAVE already has the message.
Here is an overview of the exchange.

ACCEPT EXCHANGE:

MASTER SLAVE
------ -----
PROMPT
SEND_CMD
RESPONSE (OK)
MESSAGE
COMMENT
PROMPT

REJECT EXCHANGE:

```
MASTER SLAVE
------ -----
PROMPT
SEND_CMD
RESPONSE (NO)
PROMPT
```

The SLAVE indicates it's prepared to accept a command by issuing a PROMPT. The PROMPT is also used as an an acknowledgement that the last message has be received.

The MASTER initiates the message exchange by issuing a a SEND_CMD. This command contains all the information necessary for the SLAVE to decide whether to ACCE or REJECT the message. It contains message type, destination, originator and possibly a bid.

```
COMMENT = <ASCII_STR, except '>'>
PROMPT = [COMMENT] ">" EOL

TYPE = 'B' | 'P' | 'T'
CALLSIGN = <ASCII_STR, except '@', '.', max length 6>
LOC = <ASCII_STR, except '@', '.', max length 6>
HLOC = LOC | <HLOC "." LOC, max length 31>
BBS = CALLSIGN ["." HLOC]
TO = CALLSIGN [WHITE "@" WHITE BBS]
FROM = CALLSIGN
BID = <ASCII_STR, max length 12>

SEND_CMD = "S" TYPE WHITE TO [WHITE "<" WHITE FROM] [WHITE "$" BID]
```

HLOC is the hierarchical location of the system. It is defined by the document "INTERNATIONAL ROUTING DESIGNATORS", ARRL Networking Conference Proceedings xxx.

The TO field commonly takes the following forms:

```
callsign @ BBS.hloc ; N6ZFJ @ N6QMY.CA.USA.NA
category @ distrib ; WANT @ ALLCA
category @ BBS.hloc ; WANT @ N6QMY.CA.USA.NA
category @ distib.hloc ; INFO @ ALLCA.CA.USA.NA
```

The first two are seen most often, but the other two forms are seen. The first two forms are also normally associated with the message type of PERSONAL and BULLETIN respectively.

White space is required on either side of the '@' and between the '<' and the senders callsign. There cannot be white space between the '$' and the BID.

EXAMPLE

```
SB WANT @ ALLSCV < N6ZFJ $2345_N6QMY
```

A "BID" (Bulletin IDentifier) is associated with each Bulletin, and may be associated with any Personal message.

If a BID is not given explicitly when the message is entered into
the system, and the message type requires a BID, one is created
automatically from the message number and callsign of the system
into which the message was initially entered.

NOTE:

It is suggested that a generated BID have the form nnn_BBS,
where nnn is the message number at the originating BBS system,
and BBS is the callsign of the originating BBS system.

COMMON_BID = MSG_NUM "_" CALLSIGN

BBS codes are free to create whatever form they wish as long as the
length doesn't exceed 12 characters.

Messages to a distribution, whether they are bulletins or personal
messages, must have a BID. Personal messages to a specific user may
carry a BID if the user supplied one, but will not be given a default
BID. NTS message never carry a BID.

The SLAVE BBS determines from the SEND_CMD whether or not to accept
the message. The reasons for rejection is usually that the message
already exists on the SLAVE system (i.e. a duplicate BID), or possibly
a system related problem.

Sent by SLAVE in response to SEND_CMD (or by MASTER if in reverse
forward mode).

RESPONSE = ACCEPT | REJECT

ACCEPT = "OK" [WHITE COMMENT] EOL

REJECT = "N" ["O"] [WHITE COMMENT] EOL

NOTE:
The syntax of responses has grown in a random fashion. Many BBS programs
expect to see the entire words "OK" and "NO" while others simply look
at the first letter. It is suggested that new BBS codes should present the
words "NO" and "OK", but look for only the first letter. Doing so should
ensure compatibility with existing BBS codes.

EXAMPLE
Master: SB WANT @ ALLCAN < N6ZFJ $4567_N0ARY
Slave: NO duplicate bid
Slave: >

Master: SB WANT @ ALLCAN < N6ZFJ $4567_N0ARY
Slave: OK #32190
Master: message body
Master: /EX
Slave: Message being held for sysop review
Slave: >

It is required that the "OK" and "NO" strings be followed by white
space or EOL. Some BBS programs will fail to recognize them otherwise.

EXAMPLE
Master: SB WANT @ ALLCAN < N6ZFJ $4567_N0ARY
Slave: NO, already have it
Slave: >

This would fail with some existing BBS codes due to
the comma following the "NO" string.

If the SLAVE BBS responds with a REJECT condition the message should
not be sent and the MASTER should ignore any response from the SLAVE
until PROMPT is encountered. The MASTER can then submit a new SEND_CMD,
initiate reverse forwarding or disconnect.

Once the SLAVE has issued the ACCEPT response, the MASTER BBS
should immediately send the message subject, routing headers,
message body and EOM. The SLAVE will acknowledge with PROMPT
once it receives an EOM.

Message Routing Header

SUBJECT = <ASCII_STR, max length 79> EOL
YEAR = DIGIT DIGIT
MONTH = DIGIT DIGIT
DAY = DIGIT DIGIT
HOUR = DIGIT DIGIT
MINUTE = DIGIT DIGIT

STAMP = "R:" YEAR MONTH DAY "/" HOUR MINUTE ["Z"]
MSG_NUM = <NUMBER, range 1 - 65535 (0xFFFF)>

HEADER1 = STAMP WHITE MSG_NUM "@" BBS EOL
HEADER2 = STAMP WHITE "@:" BBS WHITE [ASCII_STR] "#:" MSG_NUM [ASCII_STR]
HEADER = HEADER1 | HEADER2

Message structure

HEADERS = HEADER | HEADERS HEADER
EOM = (CNTRL_Z EOL) | (EOL "/EX" EOL)
BODY = 8BIT_STR | BODY EOL 8BIT_STR
MESSAGE = SUBJECT [HEADERS] EOL [BODY] EOM

EXAMPLE

Example message
R:930108/1729 @:N6QMY.#NOCAL.CA.USA.NA Fremont #:1114 Z:94536
R:930108/1259 1530@KA6FUB.#NOCAL.CA.USA.NA
R:930107/1638z @:WD6CMU.#NOCAL.CA.USA.NA "OSKbox" #:10576 Z:94805
R:930107/1045 50724@WX3K.#NOCAL.CA.USA.NA

message body will go here, the blank line above separates the
body from the routing headers. When the body is through it should be
terminated as follows:
/EX

NOTE:
Both forms of the header described above are seen, and should be parsed.
In either case there may be comments found at the end of the header line,
or between the BBS and the MSG_NUM entries in HEADER2.

HEADER2 is derived from the header form used in early BBS codes.
it allows addtional information to be passed in the header and parsed
if desired. Some examples of these additional fields seen are:

Z:zipcode
O:orginator
$:bid
C:name_of_sysops_cat

NOTE:
The time stamp in the routing header must be in GMT. Some existing BBS
codes provide the time stamp in other than GMT, and may include a time
zone indicator after the time stamp. This should be considered in the
design of header parsers.

Each system that handles the message places it's routing header
at the top of the message headers before passing the message to
the next BBS. The headers must begin in column 1. A blank line
separates the routing headers from the body of the message.

The last (oldest) routing header shows the BBS where the message
originated. This header is the only source for this information.
The information about the originating BBS is used to create a
return address for reply messages.

Here are two examples of the same header, in the two different formats:

R:930101/0000 1530@KA6FUB.#NOCAL.CA.USA.NA
R:930101/0000 @:KA6FUB.#NOCAL.CA.USA.NA #:1530

These examples show the different syntax for the message number and
originating BBS address. All fields not shown in the examples are
optional at the discretion of the sysop.

Section 3 - Reverse forwarding

Once all messages have either been successfully forwarded from the MASTER
to the SLAVE, or been rejected by the SLAVE, the MASTER may accept
messages from the SLAVE. i.e. the MASTER and SLAVE exchange roles.
This is called "reverse forwarding".

ACCEPT EXCHANGE:

MASTER SLAVE
------ -----
PROMPT ">"
REV_FWD "F>"
SEND_CMD
RESPONSE "OK"
MESSAGE

COMMENT
REV_FWD "F>"

REJECT EXCHANGE:

MASTER SLAVE
------ -----
PROMPT ">"
REV_FWD "F>"
SEND_CMD
RESPONSE "NO"
REV_FWD "F>"

The MASTER indicates that it is ready to accept a message by answering the SLAVE's PROMPT, ">", with a REV_FWD command, "F>". At that point the SLAVE issues a SEND_CMD and the process continues as described in section 2 but with the rolls of MASTER and SLAVE reversed. The only difference is that the MASTER will always respond with REV_FWD in place of PROMPT to indicate successful transfer.

REV_FWD = "F>" EOL

The reverse forwarding phase is optional and is under the control of the MASTER. It can be terminated by any of the following:

SLAVE disconnects

SLAVE sends anything other than a legal SEND_CMD

MASTER disconnects

MASTER sends anything other than "F>".

Section 4 - Forwarding to old BBSs

If the SLAVE does not return a SID then it is assumed that it will not support BIDs nor OK/NO message rejection.

The SLAVE indicates it is prepared to accept a command by issuing a PROMPT. This PROMPT is also an acknowledgement that the last message has been received.

The MASTER initiates the message exchange by issuing a SEND_CMD with no HLOC or BID. The SLAVE has no way to reject the message so the MASTER proceeds to send the message subject and body without expecting acknowlegement from the SLAVE.

Since the SLAVE assumes a user is entering the message, it will display prompts to lead the user through the message sending process, asking for a subject, prompting for the message body, etc. The MASTER should consider this text to be part of the PROMPT and ignore it.

As in Section 2, the MASTER waits until PROMPT is received. This is the acknowledgement that the message has been recieved and the next message can be sent.

When the MASTER has no additional messages to send it disconnects
from the SLAVE. Reverse forwarding is not supported in this situation.

Section 5 - Error Conditions

When an error of any nature is detected by either the MASTER or the SLAVE,
that station will disconnect at once, without issuing a PROMPT.

Section 6 - BNF Summary

Meta-syntactic information.

[x] = Optional Zero or one x.
(x y) = Grouping. Treat multiple tokens as single token.
<> = Set.

Characters of interest.

TAB = <0x09>
LF = <0x0a>
CR = <0x0d>
CNTRL_Z = <0x1a>
SP = <0x20>

Character sets of interest.

ALPHA = <'A' - 'Z', 'a' - 'z'>
DIGIT = <'0' - '9'>
ALNUM = ALPHA | DIGIT
ASCII = <0x20 - 0xff>
SPACE = SP | TAB
8BIT = <0x01 - 0xff, except CR, LF, CTRL_C, CTRL_Z>

Character sequences of interest.

EOL = CR | LF | CR LF

NUMBER = DIGIT | NUMBER DIGIT
WHITE = SPACE | WHITE SPACE

ASCII_STR = ASCII | ASCII_STR ASCII
ALNUM_STR = ALNUM | ALNUM_STR ALNUM
8BIT_STR = 8BIT | 8BIT_STR 8BIT

System identifier syntax.

AUTHOR_ID = <ASCII_STR, except '[', ']', '-'>
AUTHOR_DATA = <ASCII_STR, except '[', ']'>
FEATURE = ALPHA [DIGIT]
FEATURE_LIST = FEATURE | FEATURE_LIST FEATURE
SID = "[" AUTHOR_ID ["-" AUTHOR_DATA] "-" FEATURE_LIST "]" EOL

System Prompt syntax.

COMMENT = <ASCII_STR, except '>'>
PROMPT = [COMMENT] ">" EOL

Send Command syntax.

```
TYPE = 'B' | 'P' | 'T'
CALLSIGN = <ASCII_STR, except '@', '.', max length 6>
LOC = <ASCII_STR, except '@', '.', max length 6>
HLOC = <LOC | HLOC "." LOC, max length 31>
BBS = CALLSIGN ["." HLOC]
TO = CALLSIGN [("@" | WHITE "@" WHITE) BBS]
FROM = CALLSIGN
BID = <ASCII_STR, max length 12>
SEND = "S" TYPE WHITE TO [WHITE "<" WHITE FROM] [WHITE "$" [BID]]
```

Message syntax.

```
SUBJECT = <ASCII_STR, max length 79> EOL
```

```
YEAR = DIGIT DIGIT
MONTH = DIGIT DIGIT
DAY = DIGIT DIGIT
HOUR = DIGIT DIGIT
MINUTE = DIGIT DIGIT
STAMP = "R:" YEAR MONTH DAY "/" HOUR MINUTE
MSG_NUM = <NUMBER, range 1 - 65535>
HEADER1 = STAMP WHITE MSG_NUM "@" BBS EOL
HEADER2 = STAMP WHITE "@:" BBS WHITE [ASCII_STR] "#:" MSG_NUM [ASCII_STR]
HEADER = HEADER1 | HEADER2
HEADERS = HEADER | HEADERS HEADER
```

```
BODY = 8BIT_STR | BODY EOL 8BIT_STR
EOM = (CTRL_Z EOL) | (EOL "/EX" EOL)
MESSAGE = SUBJECT [HEADERS] EOL [BODY] EOM
```

Standard message identification syntax.

```
MSG_ID = MSG_NUM "_" CALLSIGN
```

Section 7 - Feature Letter Use

Feature $:

Supports BIDs.

Feature H:

Supports Hierarchical Location designators.

Feature I:

Some transport mechanisms do not identify the calling station in the
protocol as AX25 does. To handle this situation, a "null command"
is defined as a line beginning with ';'. This allows the sending station
to send callsigns to satisfy the regulations for station identification.

EXAMPLE

```
; W5SMM de W0RLI
```

The receiving station must ignore such lines.

END OF SPEC

--

Hank Oredson @ Mentor Graphics
Internet : hank_oredson@mentorg.com
Amateur Radio: W0RLI@W0RLI.OR.USA.NA

591. PK900 ?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-13 18:26:03 UTC
From: grady@netcom.com
Message-ID: <gradyCEuLvG.n0n@netcom.com>
Source record: 51378

I'm in the market for a multi-mode controller
than can grow with me. Is the PK900
worth the bucks or should I save $$$ by
going with MFJ?

Are PK and MFJ owners happy?

--
'"PGP," warns Dorothy Denning, a Georgetown University professor
who has worked closely with the National Security Agency,
"could potentially become a widespread problem.' -- (E. Dexheimer)
Grady Ward grady@netcom.com (707) 826-7715 [voice/24 hr FAX]

592. Re: MacTCP radio driver?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-13 20:54:08 UTC
From: bcoleman@hayes.com
Message-ID: <8092.2cbc32b0@hayes.com>
Source record: 51380

In article <EMERY.93Oct1091359@bert.cs.byu.edu>, emery@bert.cs.byu.edu (Emery Weber) writes:
> On Fri, 1 Oct 1993 03:33:19 GMT, ewing@cis.yale.edu (Martin Ewing) said:
>> Nntp-Posting-Host: capstan.secf.cis.yale.edu
>
>> It seems that one approach to Macintosh tcp/ip radio would be to
>> do away with ka9q (Net/Mac, not the person :-) and use the standard
>> MacTCP network package that we use on Ethernet or LocalTalk. One
>> would need a driver to tell it about AX.25. After you had that, you
>> could use NCSA Telnet, and various other PD Mac packages.
>
> This sounds like a good idea, but it would need to be modified so that you
> could receive mail. It would also need to have improved routing so that
> you could digipeat through various nodes. The way it is now, I believe that
> everything not on your subnet must be routed to one specific gateway whereas
> I might want to digipeat through someone else even if he is on my subnet.

Gary, I don't know if are addressing the question as asked. Do you actually know of someone who has the appropriate driver (I think they are called LDEVs) for MacTCP and has tried this? Did they run into "packet storm" problems?

MacTCP has the capability of assigning a link driver (LDEV) for the appropriate type of link. An LDEV written for AX.25 would have the appropriate parameters. It isn't like you have a ethernet or token ring connection that you "trick" into sending over AX.25. TCP/IP is very generic in that it doesn't care what type of link it uses. So, theoretically, this should work.

Ever since Apple came out with LDEVs for MacTCP v1.1, I've been watching for someone to produce an LDEV. So far, nothing. Anyone have any further information? Is there some fundamental problem with developing one?

I'd be very interested if someone has come up with one.

--
Bill Coleman, AA4LR ! CIS: 76067,2327 AppleLink: D1958
Principal Software Engineer ! Packet Radio: AA4LR @ W4QO
Hayes Microcomputer Products, Inc. ! UUCP: uunet!hayes!bcoleman
POB 105203 Atlanta, GA 30348 USA ! Internet: bcoleman%hayes@uunet.uu.net
Disclaimer: "My employer doesn't pay me to have opinions."
Quote: "The same light shines on vineyards that makes deserts." -Steve Hackett.

593. Re: Macintosh & Packet: Need HELP!

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-14 00:01:50 UTC
From: quent@md.fsl.noaa.gov
Message-ID: <quent.750556910@qwerty-gw>
Source record: 51386

Yup, it works well. I use an LCII with a Kantronics KPC-3. I'm experimenting with various communications software to talk to the TNC. So far I'm just using a terminal emulator but have looked at a couple packet oriented applications. Savant looks nice but I'm starting to do TCP work and there's only one package available for that (Mac/Net).

Quent Johnson Internet: quent@md.fsl.noaa.gov
NOAA Forecast Systems Laboratory Packet Radio: N0WCH@WA8ZIA.#NECO.CO.USA.NA
Modernization Division /\~/\^/\^/\~ Boulder, Colorado

594. HAM-server index file

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-14 03:05:24 UTC
From: HAMSinfo@GRAFex.sbay.org
Message-ID: <gate.750567924@GRAFex.sbay.org>
Source record: 51388
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc

```
Executed: Wed Oct 13 23:05:02 1993

NOTE: New email address:
HAM-server@GRAFex.sbay.org

Index of files.

NOTES: ----------------------------------------------------------------

If you do not know how to use HAM-server, send email to
HAM-server@GRAFex.sbay.org. In the text, place HELP.

If you order a file and do not get it, check the index to be sure you have
spelled the filename correctly. If you have ordered the file correctly,
then order a new INDEX, as I may have moved the file to a different
directory. The system is still expanding, and I am trying to keep it in
managable chunks.

Also, if you have ordered files from HAM-server and do not receive them, it
might be because your return path is incorrect. My bounce mailbox fills up
quite regularly with bounce messages. And, since the path is incorrect, I
cannot contact you to let you know.

Orders must be sent to HAM-server. Orders sent to KA6ETB or HAMSinfo are
ignored. If you are reading this from usenet, do not respond to this post.
You must send email to HAM-server@GRAFex.sbay.org.

A new INDEX is automatically generated weekly and when files are moved or
added.

The archives may contain the same file under different names. If you should
run across one of these, please let me know with email to
KA6ETB@GRAFex.sbay.org

-------------------------------------------------------------------------

Directory: /hamradio/

00-INDEX.TXT 10277 6-18-93

Directory: /hamradio/10meters/

10MBEACO.LST 6233 3-26-93

Directory: /hamradio/advanced/

ADV21.ZIP 103501 6-18-93
ADVANCED.FRQ 1275 8-15-91
```

Directory: /hamradio/antennas/

ANTENNAS.BAS 2227 3-26-93
ANTENNAS.TXT 7771 2-02-93
BUTERNUT.TXT 6106 3-26-93
CRPT2NTA.TXT 10713 2-02-93
DISCONE.TXT 1805 3-26-93
LOADPOLE.ZIP 7542 3-01-93
MININEC3.ZOO 164929 3-01-93
MOBILE.TXT 4458 3-26-93
PORTABLE.ANT 1735 5-26-93
YAGIMAX.ZIP 352305 3-01-93

Directory: /hamradio/arrl/

ARRLBBS.TXT 3153 3-03-93
ARRLDIGI.TXT 23303 2-02-93
ARRLINDX.TXT 17591 3-02-93
ARRLINFO.TXT 3321 2-02-93
ARRLJOB.TXT 18455 2-02-93
ARRLLOGO.PS 2911 2-02-93
ARRLPIO.TXT 116131 2-02-93
QSLBURO1.TXT 14440 2-02-93
QSLBURO2.TXT 10117 2-02-93

Directory: /hamradio/bandplan/

BANDPLAN.DOC 2528 3-24-92
PLAN129.TXT 1928 8-12-91
PLAN222.TXT 585 12-22-91
PLAN2M.TXT 522 8-12-91
PLAN440.TXT 572 8-12-91
PLAN6M.TXT 249 8-12-91
PLAN900.TXT 1108 8-12-91

Directory: /hamradio/callbook/

CALBK-WP.TXT 4064 8-17-92
CALLBOOK.C 18991 3-26-93
CLBK-ARY.TXT 1592 12-28-90
CLBK-EYH.TXT 1480 3-07-93
CLBK-INT.TXT 2280 3-06-93
CLBK-IYA.TXT 556 11-23-91

Directory: /hamradio/code/

AUTOCW.ARC 60849 3-01-93
CODETEST.HIN 7287 3-26-93
CW.ARC 62536 3-01-93
CW104.ZIP 83367 3-01-93
FFTMORSE.ZIP 27344 3-01-93
HAMCOM21.ZIP 182531 3-01-93
MACHINE.ARC 13061 3-01-93
MOR21.ZIP 53013 6-18-93

MORSE.BAS 5661 3-01-93
MORSE30B.ZIP 71113 3-01-93
MORSETST.BAS 7179 3-01-93
PROCW.ZIP 24227 3-01-93
ROBOCOPY.ZIP 27346 3-01-93
SM316.ZIP 109484 3-01-93
SUPERIOR.INF 1033 7-26-93
SUPERIOR.SHR 92208 3-19-93

Directory: /hamradio/contests/

CONTEST.ARC 25065 3-01-93
CONTEST.ZIP 147989 3-01-93
CT626.ZIP 178372 3-01-93
UNIGRID2.BAS 12341 3-26-93
WHATSON.ARC 15826 3-01-93
WLOGDEMO.ZIP 163276 3-01-93
WRTLOG60.ZIP 836615 6-08-93

Directory: /hamradio/

00-INDEX.TXT 10277 6-18-93

Directory: /hamradio/dx/

AUTOLOG4.ARC 165621 3-01-93
DXB20DMO.ZIP 129658 3-01-93
DXCC104.ARC 120117 3-01-93
DXCCK2DI.TXT 15904 2-02-93
DXLOCATE.LST 35911 3-26-93
DXLOG185.ZIP 171738 3-01-93
HAM_LOG.ZIP 94848 3-19-93
HFPROP.BAS 12300 3-26-93
LOGBOOK.ARC 104668 3-01-93
LOGBOOK.ZIP 83422 3-19-93

Directory: /hamradio/exams/

AUTOEXAM.ZIP 251630 3-01-93
EXAMCRDT.TXT 6490 2-02-93
EXAM_OPS.TXT 7431 2-02-93
HAMQUIZ.ZIP 101015 3-19-93
HAMSTACK.TXT 3439 2-02-93
HANDICAP.TXT 9632 2-02-93
VEFC24.ARC 26774 3-01-93

Directory: /hamradio/extra/

EXT21.ZIP 99672 6-18-93
EXTRA.FRQ 1157 8-25-91

Directory: /hamradio/general/

GEN012.ZOO 24160 6-18-93
GEN21.EXE 83879 3-19-93
GEN21.ZIP 72931 6-18-93
GENTEST.EXE 136865 1-11-92

Directory: /hamradio/help/

BCUMAHAM.TXT 5156 3-28-93
BITFTP.HLP 11347 5-09-93
ELMER100.ZIP 65425 3-01-93
ELMERS.DIR 46722 3-07-93
ELMRINFO.TXT 6984 2-02-93
ELMRLIST.TXT 46722 3-07-93
FAQ_HAM1.TXT 20412 2-02-93
FAQ_HAM2.TXT 33497 2-02-93
FAQ_HAM3.TXT 86169 3-07-93

Directory: /hamradio/hf/

COMB6.ZIP 43190 3-01-93
GC103.ARC 23776 3-01-93
MICROMUF.BAS 4881 3-01-93
MICROMUF.PAS 7695 3-01-93
SOL_GEO.DAT 24836 2-02-93
SOL_TERA.TXT 27028 2-02-93

Directory: /hamradio/internet/

FTPSITES.TXT 3480 6-06-93
GATEWAYS.TXT 5785 2-02-93
HAMEMAIL.TXT 223537 2-02-93
NEWSGRPS.TXT 6917 2-02-93
RECINFO.TXT 9252 3-14-93
USNETSEL.TXT 8164 2-02-93

Directory: /hamradio/macstuff/

ADVANCED.SIT 133986 4-11-93
EXTRA.SIT 128944 4-11-93
FREQVALE.HQX 112932 8-17-93
GENERAL.SIT 97148 4-11-93
MAC525_1.HQX 89968 8-17-93
MAC535.HQX 122083 8-17-93
MCMORSIT.HQX 44983 7-14-93
MORSE.MAC 263 3-02-91
NOVICE.SIT 121453 4-11-93
SAVANTDM.HQX 178005 8-17-93
SAVNTUPD.HQX 80757 8-17-93
SOFTKISS.HQX 145274 8-17-93
SOURCE93.06 23768 6-20-93
TECH.SIT 107031 4-11-93
SOFTWARE.MAC 24267 10-13-93

Directory: /hamradio/misc/

9PN-25PN.TXT 676 3-27-93
AUTOLOG.ZIP 109886 3-19-93
BATTRIES.TXT 9694 2-02-93
BBS_LIST.TXT 41800 2-28-93
BEACONS.INF 2284 7-29-92
CA-PHONE.BBS 1338 11-06-92
CHART.C 1999 3-26-93
CONDOR.INF 2870 9-26-92
CONDORMP.TXT 3486 7-16-89
EASYLOGR.ZIP 228482 3-19-93
FCC-PRB1.TXT 25754 4-05-93
FLNTALAW.TXT 3528 2-02-93
HAMPLTES.TXT 5507 2-02-93
HAM_READ.ARC 1366 3-19-93
K1EA-619.EXE 315212 3-19-93
K2UYH.ARC 108510 3-19-93
LOGOS.PS 9258 2-02-93
MAILORDR.TXT 20383 2-02-93
MAP.ZIP 802214 3-19-93
MARS.FRQ 987 8-28-93
NICADS.INF 6533 3-26-93
PRO-2004.MOD 4418 3-26-93
PRO-2004.REV 18797 3-26-93
QSLCARD1.PS 27337 3-26-93
QSLCARD2.PS 6399 3-26-93
RFI.TXT 1991 3-17-93
RFI001.TXT 2158 6-08-89
RFI002.TXT 1815 6-08-89
RFI003.TXT 3288 6-08-89
RFI_TIPS.TXT 5948 2-02-93
SCANNER.MOD 5287 3-26-93
SMITHCHA.PS 23664 3-26-93
UC-U2AT.REV 7239 3-26-93
VHFPROP.BAS 24498 3-26-93

Directory: /hamradio/mods/

2ETO2AT.MOD 1443 8-07-93
56KBFIX.MOD 1093 5-26-93
741AMODS.ZIP 8974 5-26-93
760XLT.MOD 490 5-26-93
ALLBAND.MOD 2870 5-26-93
ALR22T.MOD 2152 5-26-93
BC205XLT.MOD 4221 5-26-93
DJ-580 155310 5-26-93
DJ500.MOD 2885 5-26-93
DR510.MOD 4186 5-26-93
FRQSGALR.ZIP 206290 5-26-93
FT-530.MOD 2302 8-07-93
FT101E.MOD 2639 5-26-93
FT209RH.MOD 1034 5-26-93
FT212RH.MOD 1345 5-26-93

FT23R.MOD 776 5-26-93
FT411.MOD 4824 5-26-93
FT411-2.MOD 1026 5-26-93
FT470-2.MOD 9942 5-26-93
FT470-3.MOD 1951 5-26-93
FT4700.MOD 1195 5-26-93
FT727CAT.MOD 2520 5-26-93
FT727R.MOD 1071 5-26-93
FT747GX.MOD 1221 5-26-93
FT767GX.MOD 1452 5-26-93
HT-24-T.MOD 3581 7-24-93
IC-24.MOD 2071 5-26-93
IC-MU2.MOD 1186 5-26-93
IC02.MOD 2082 5-26-93
IC02-2.MOD 1231 5-26-93
IC02-3.MOD 861 5-26-93
IC04.MOD 1897 5-26-93
IC24-2.MOD 993 5-26-93
IC24-3.MOD 5387 5-26-93
IC2410.MOD 4437 5-26-93
IC28.MOD 479 5-26-93
IC2SAT.MOD 4994 5-26-93
IC2SAT-2.MOD 8131 5-26-93
IC32.MOD 2501 5-26-93
IC32-2.MOD 2719 5-26-93
IC3200A.MOD 452 5-26-93
IC37.MOD 3900 5-26-93
IC735IBM.MOD 1407 5-26-93
IC900.MOD 2945 5-26-93
ICOM32AT.MOD 1937 5-26-93
ICOM735.1 3614 5-26-93
ICOM735.2 1380 5-26-93
ICOM735- 3614 5-26-93
ICW2A.MOD 13392 5-26-93
KAMDCD.MOD 2048 5-26-93
KENWD930.MOD 6640 5-26-93
NOAASTNS.ZIP 20995 5-26-93
PK232LOK.MOD 1858 5-26-93
PORTABLE.ANT 1735 5-26-93
PRO2004.MOD 5157 5-26-93
PRO2005.MOD 2602 5-26-93
PRO2006.MOD 3119 5-26-93
PRO2020.MOD 4775 5-26-93
PRO34.MOD 1239 5-26-93
R7000.MOD 3404 5-26-93
R7000-2.MOD 26880 5-26-93
RADIO.MOD 4915 5-26-93
RDIOMODS.SRV 956 5-26-93
TC2DUPLX.MOD 1581 5-26-93
TH-215A.MOD 2174 3-26-93

TH215 2072 5-26-93
TH215.MOD 2227 5-26-93
TH225.MOD 2932 5-26-93
TH25.MOD 7811 5-26-93
TH27A 6725 5-26-93
TH28A 2608 5-26-93
TH75.MOD 1385 5-26-93
TINY2TNC.MOD 1431 5-26-93
TM-721A.MOD 4867 3-26-93
TM-741-M 17526 5-26-93
TM2570A.MOD 778 5-26-93
TM321A.MOD 600 5-26-93
TM321A-2.MOD 957 5-26-93
TM321A-3.MOD 1415 5-26-93
TM421A.MOD 1836 5-26-93
TM701.MOD 2979 5-26-93
TM701A.MOD 280 5-26-93
TM721.MOD 4228 5-26-93
TM721-2.MOD 2784 5-26-93
TM721-3.MOD 6073 5-26-93
TM721A 13389 5-26-93
TM731.MOD 1612 5-26-93
TM741.MOD 1230 5-26-93
TM941A-2.MOD 2723 5-26-93
TNC2.MOD 1589 5-26-93
TNC2A.MOD 3329 5-26-93
TS-930S.MOD 2226 3-26-93
TS140.MOD 563 5-26-93
TS430.MOD 825 5-26-93
TS430-2.MOD 844 5-26-93
TS430MOD.DOC 2719 3-26-93
TS430S.REV 5066 3-26-93
TS440.MOD 1589 5-26-93
TS440-AT.MOD 971 5-26-93
TS440S.INT 9986 3-26-93
TS680.MOD 514 5-26-93
TS680-2.MOD 2940 5-26-93
TS711.MOD 123 5-26-93
TS790A.MOD 5059 5-26-93
TS850-1.MOD 12088 5-26-93
TS850-2.MOD 9086 5-26-93
TS930.MOD 6931 5-26-93
TS940IBM.MOD 2539 5-26-93
U2AT.MOD 3161 5-26-93
UNI2510.MOD 1622 5-26-93

Directory: /hamradio/newfiles/

AMPR.ORG 409718 7-06-93
FRQSGALR.ZIP 206290 5-26-93
NOAASTNS.ZIP 20995 5-26-93

```
NTEX_MS.ARC 118873 3-19-93
PCECAP.ZIP 100174 3-19-93
TEC20.ZIP 88796 3-19-93
TEC21.EXE 95783 3-19-93
TRAVINFO.LST 38204 3-26-93
TUNEUP.TNC 2557 7-03-91
UC-U2AT.REV 7239 3-26-93
WIRETAP.TXT 32215 3-26-93
NETMAC52.SIT 178633 9-29-93
NETMAC55.SIT 179770 9-29-93
NET_AMIG.ARC 108322 9-29-93
NET_BM.ARC 37772 9-29-93
NET_DES.ARC 26249 9-29-93
NET_DOC.ARC 143194 9-29-93
NET_EW.ARC 115955 9-29-93
NET_MAC.HQX 223461 9-29-93
NET_READ.ME 2443 9-29-93
NETAMSRC.ARC 56320 9-29-93

Directory: /hamradio/novice/

NOV21.EXE 106365 3-19-93
NOVICE25.ARC 50049 3-01-93
NOV_TEST.ZIP 95588 3-01-93

Directory: /hamradio/nts/

3RDPARTY.LST 1802 9-09-91
CANADA.ADR 375 2-14-90
COUNTRY.ADR 2975 11-25-91
NTS12.ZIP 93145 6-18-93
NTSDISK.EXE 37401 11-20-91
RGRAM27.ZIP 48027 3-19-93
ZIPCODE.EXE 214180 2-22-93

Directory: /hamradio/packet/

AMTORFRQ.TXT 9158 10-13-93
9600BAUD.PKT 8154 3-06-91
A802MANP.TXT 35627 8-10-93
ARYGATE.TXT 10286 4-11-93
AX25SPEC.TXT 66235 3-30-93
BBSTIP01.TXT 1435 1-04-91
BBSTIP02.TXT 1868 1-04-91
BBSTIP03.TXT 1869 1-04-91
BBSTIP04.TXT 2032 1-04-91
BBSTIP05.TXT 2196 1-04-91
BBSTIP06.TXT 1132 1-04-91
BBSTIP07.TXT 1180 1-04-91
BBSTIP08.TXT 863 1-04-91
BBSTIP09.TXT 2260 1-04-91
BBSTIP10.TXT 1325 1-04-91
```

```
BBSTIP11.TXT 1755 1-04-91
BBSTIP12.TXT 2222 1-04-91
BBSTIP13.TXT 2305 1-04-91
CATEGORY.LST 3477 1-26-92
CHEAPPKT.TXT 4258 3-30-93
FAQ.TXT 33570 3-08-93
FAQ_PAKT.TXT 29942 2-02-93
HFHINTS.TXT 3020 4-05-90
HI-SPEED.NET 15864 8-07-93
HIERADR.DOC 4849 6-15-90
INFOPAKT.TXT 39574 2-02-93
KAM401.ARC 156061 3-01-93
NEXTGEN.BBS 3948 3-21-93
PKTINFO1.TXT 2891 2-20-93
PKTINFO2.TXT 6338 2-02-93
ROUTING.TXT 28069 3-26-93
RTTY12G.ARC 126651 3-01-93
SETTINGS.TNC 1089 7-03-91
TTY37.ARC 36600 3-01-93
WP.DOC 1507 5-09-93
XPCOM131.ZIP 403741 5-29-93
HFBBS.TXT 19833 10-13-93

Directory: /hamradio/packet/loz/

00-INDEX.TXT 2446 4-19-93
PACKET01.LOZ 3746 3-03-93
PACKET02.LOZ 9436 3-04-93
PACKET03.LOZ 6675 3-07-93
PACKET04.LOZ 7372 3-10-93
PACKET05.LOZ 6155 3-17-93
PACKET06.LOZ 15037 3-23-93
PACKET07.LOZ 5707 5-11-92
PACKET08.LOZ 6715 5-12-92
PACKET09.LOZ 4578 5-12-92
PACKET10.LOZ 8698 1-31-93
PACKET11.LOZ 6493 1-31-93
PACKET12.LOZ 5881 5-13-92
PACKET13.LOZ 6285 5-29-92
PACKET14.LOZ 7157 5-13-92
PACKET15.LOZ 4714 5-14-92
PACKET16.LOZ 3396 5-14-92
PACKET17.LOZ 4683 5-14-92
PACKET18.LOZ 2168 5-14-92
PACKET19.LOZ 4902 5-15-92
PACKET20.LOZ 7564 5-15-92
PKTINF01.TXT 4109 7-22-91
PKTINF02.TXT 6580 7-28-91
PKTINF03.TXT 4555 8-06-91
PKTINF04.TXT 3806 8-12-91
PKTINF05.TXT 4484 8-21-91
```

PKTINF06.TXT 4192 9-03-91
PKTINF07.TXT 4885 9-09-91
PKTINF08.TXT 4676 9-17-91
PKTINF09.TXT 3938 10-01-91
PKTINF10.TXT 2786 10-28-91
PKTINF11.TXT 3412 11-12-91
PKTINF12.TXT 7717 11-26-91
PKTINF13.TXT 2480 12-17-91
PKTINF14.TXT 2499 1-06-92
PKTINF15.TXT 2975 1-06-92
PKTINF16.TXT 1646 1-14-92

Directory: /hamradio/packet/software/

APL700.EXE 412928 8-26-93
FE.ZIP 16626 7-14-93
GP.DOC 125349 7-24-93
GP-1X50.ZIP 370518 7-06-93
LANDC159.EXE 153301 3-19-93
LANLK159.EXE 192812 3-19-93
PAX285.ZIP 15395 7-14-93
PCT214.ZIP 378739 3-01-93
PKGOL624.ZIP 323067 3-26-93
PKTSFTWR.TXT 4185 2-02-93
RTTY12G.ARC 126651 3-01-93
SELCAL11.ZIP 12590 3-01-93
TTY37.ARC 36600 3-01-93
XPCOM131.ZIP 403741 5-17-93

Directory: /hamradio/packet/software/aa4re/

AA4REBBS.INF 2654 4-11-93
AA4REBBS.ZIP 357277 3-19-93
B21TANSI.ZIP 3620 5-26-93
BB21HC.ZIP 259837 5-26-93
BB21HL.ZIP 110380 5-26-93
BB21HN.ZIP 358648 5-26-93
BB21HP.ZIP 239199 5-26-93
DOC211.ZIP 99644 5-26-93
HH21H.INF 1377 5-26-93
MBB35SRC.ZIP 72475 5-26-93
MBBIOS35.ZIP 29299 5-26-93
MBBIOS38.ZIP 39704 5-26-93
WATCHDOG.ZIP 8425 5-26-93

Directory: /hamradio/packet/software/dsp/

DOC.ZIP 301000 9-02-93
DSP105.ZIP 46817 9-02-93
DSP4SCHE.ZIP 238499 9-02-93
DSPTIPUP.ZIP 21417 9-02-93
SOURCE.ZIP 671625 9-02-93

Directory: /hamradio/packet/software/g8bpq/

BPQ405E.ZIP 143360 5-26-93
BPQ406.ZIP 170880 5-26-93
BPQ406A.ZIP 20216 5-26-93
BPQ406E.ZIP 181926 5-26-93
RSWD0330.ZIP 66213 5-26-93
RZSW30.ZIP 97411 5-26-93
TFPCX.ZIP 34817 5-26-93

Directory: /hamradio/packet/software/thebox/

BOOTARC.EXE 243874 7-19-93
INSTALL.BAT 174 7-19-93
NOS_1229.EXE 203295 7-06-93
NOS_1229.LP 172009 7-06-93
NOS_1229.MAN 221639 7-06-93
NOS_1229.MAP 75531 7-06-93
NOS_1229.NR 168281 7-06-93
NOS_1229.VER 52 7-06-93
SOURCARC.EXE 131999 7-19-93
SYSARC.EXE 105377 7-19-93
SYSOP15.ENG 65121 7-19-93
UPDATE.BAT 1354 7-19-93

Directory: /hamradio/packet/software/thenet/

THENET.FLA 6498 7-19-93
THENET.INF 4005 7-19-93
THENET.PAR 3692 7-19-93
TNET-X1G.TXT 68 7-19-93
TNET-X1G.ZIP 119680 7-19-93
TNET-X1H.ZIP 123904 7-19-93

Directory: /hamradio/packet/software/f6fbb/

FBB515.ZIP 991152 7-30-93
TPK181.ZIP 579533 7-30-93

Directory: /hamradio/packet/software/wa7mbl/

OIZ-UTIL.ARC 64062 7-30-93
REQDIR.ARC 34438 7-30-93

Directory: /hamradio/packet/software/wa8ded/

TNCDED.DOC 29130 7-30-93
TNCDED.HEX 45068 7-30-93
TNCDED.MSG 4116 7-30-93
WA8DED 1004 7-30-93
WA8DED.DOC 14790 7-30-93
WA8DED.ROM 19284 7-30-93

Directory: /hamradio/packet/tcpip/

00-INDEX.TXT 1602 6-08-93
AMPR.ORG 409718 7-06-93
AMPRHOST 303457 7-06-93
AMPRINFO.TXT 5603 2-02-93
AMPRXORG.REV 516969 7-06-93
ASMOBJ.MSG 607 6-08-93
ASMOBJ.ZIP 6766 6-08-93
BMEXE332.ZIP 30898 6-08-93
BMSRC_ST.ARC 25334 8-07-93
CONNEX.Z 12030 7-06-93
E920603.ZIP 189423 6-08-93
EXPIRY.ZIP 53196 6-08-93
HELP_V02.ZIP 11984 7-06-93
INTRONOS.ZIP 54272 7-06-93
MAN-9106.ZIP 57169 6-08-93
NAN24HYC.ZIP 42635 6-08-93
NOS-SLFP.ZIP 310211 6-08-93
NOSVIEW.ZIP 1764 7-06-93
NOSVW304.ZIP 682322 7-06-93
PCNET.EXE 227498 4-26-92
PKTDRVR.INF 157 6-08-93
ROSE-NOS.ZIP 18050 7-06-93
S920603.ZIP 656302 6-08-93
SATTRACK.ZIP 34886 7-06-93
SLFP123.ZIP 30476 6-08-93
TCPIP.INF 5818 6-02-93
VIEW9206.ZIP 384591 6-08-93

Directory: /hamradio/packet/tcpip/bm/

BM.DOC 16641 9-02-93
BM332C.TXT 235 9-02-93
BM332C.ZIP 52889 9-02-93
BMEXE.ARC 38547 9-02-93
BMH02.TXT 790 9-02-93
BMH02EXE.ZIP 300305 9-02-93
BMH02SRC.ZIP 60096 9-02-93
BMUTIL.ZIP 11546 9-02-93
VIEW0207.ZIP 320436 9-02-93

Directory: /hamradio/packet/tcpip/docs/

BEGIN.DOC 110255 2-07-91
FAQ-1292 75121 7-06-93
INTRONOS.ZIP 54272 7-06-93
KA9QBGN.ZIP 190366 6-08-93
KA9QNOS.NR 141577 7-06-93
KA9QNOS.PS 133704 7-06-93
NETNIX.PS 286542 7-06-93
NOSBGNLP.ZIP 57488 7-06-93
NOSBGNPS.ZIP 137021 7-06-93
RSPF22P.TXT 85164 7-06-93

TAPR92.TXT 72334 7-06-93
TAPR9600.MOD 11209 7-06-93
TDMA.TXT 12713 7-06-93
USERMAN.ZIP 112344 7-06-93

Directory: /hamradio/packet/tcpip/g1emm/

G1EMMKIT.EXE 168079 7-06-93
G1EMMKIT.ZIP 213973 7-06-93
KH113016.EXE 193643 7-06-93
KH113016.ZIP 593938 7-06-93
PCELM21.ZIP 116682 7-06-93
READ.ME 1077 7-06-93
SMALLEMM.EXE 134945 7-06-93

Directory: /hamradio/packet/tcpip/gpsnos/

GPSC1DOC.ZIP 38361 7-30-93
GPSC1EXE.ZIP 162104 7-30-93
GPSC1HLP.ZIP 13415 7-30-93
GPSC1SRC.ZIP 638737 7-30-93

Directory: /hamradio/packet/tcpip/gracilus/

GCALLBK.TXT 440 7-06-93
GCALLBK.ZIP 13914 7-06-93
GRAC20M2.ZIP 539910 7-06-93
P10DVR.TXT 824 7-06-93
P10DVR.ZIP 25230 7-06-93
P10R30E.TXT 29184 7-06-93
P10R30E.ZIP 291851 7-06-93
TWINDV21.ZIP 38656 7-06-93

Directory: /hamradio/packet/tcpip/pa0gri/

GR-BUGS.BEE 5120 7-06-93
GR-NOTES.BEE 19584 7-06-93
GRIBEE08.ZIP 831616 7-06-93
GRNOS08.ZIP 268800 7-06-93
GRNOS08S.ZIP 257408 7-06-93
NOS_1229.DOC 172009 7-06-93
NOS_1229.EXE 203295 7-06-93
NOS_1229.MAN 221639 7-06-93
NOS_1229.MAP 75531 7-06-93
NOS_1229.ROF 168281 7-06-93
NOS_1229.VER 52 7-06-93
NOS_1229.ZIP 821866 7-06-93
RSPF0826.TXT 294 7-06-93
RSPF0826.ZIP 53695 7-06-93

Directory: /hamradio/packet/tcpip/pe1chl/

920420.DIR 6353 7-06-93
920420LT.ARC 175565 7-06-93
920420MT.ARC 111710 7-06-93
920420TC.ARC 153934 7-06-93
920420TP.ARC 104054 7-06-93
920420TS.ARC 113244 7-06-93
AUTOEXEC.DRS 2321 7-06-93
HISTORY.ARC 48620 7-06-93
NETDOC1.ARC 16485 7-06-93
NETDOC2.ARC 44672 7-06-93
PACSAT.ARC 87474 7-06-93
PB920430.ZIP 131138 7-06-93
PE1CHL.NET 417 7-06-93
README.CHL 384 7-06-93
SCCPRIN5.ARC 159020 7-06-93

Directory: /hamradio/packet/tcpip/wg7j/

JNOS107B.EXE 283045 7-06-93
JNOS107B.ZIP 987123 7-06-93
WG7JDOC.ZIP 46266 7-06-93

Directory: /hamradio/rigs/

COMPICOM.TXT 15707 3-26-93
FRGLOD10.ZIP 14451 4-01-93
HF_RIGS.TXT 4317 2-02-93
HT_INFO.TXT 10990 2-02-93
IC-12AT.REV 6682 3-26-93
IC-32AT.MOD 2715 3-26-93
IC02A.MOD 2424 3-26-93
IC02ATR.MOD 3294 3-26-93
IC28H.REV 6855 3-26-93
ICOM.C 9232 3-14-93
ICOM-110.C 9842 3-26-93
ICOMCI-V.CMD 7443 3-26-93
INFOEQPT.TXT 10063 2-02-93
KENWD930.MOD 6640 3-26-93
MNUFCTRS.TXT 5051 2-02-93
QST_REVW.TXT 41097 2-02-93
R7000.HIN 26430 3-26-93

Directory: /hamradio/satelite/

DOVE3W13.ZIP 43150 3-01-93
ELETRANS.C 2176 3-26-93
GEOSAT20.ZIP 56405 3-01-93
HAM_SAT.TXT 10967 2-02-93
ORBIT23.ARC 36852 3-01-93
PROTOCOL.1 39022 6-19-89
PROTOCOL.2 2157 6-19-89
QUICKS24.ZIP 77120 3-01-93
SATELITE.BAS 5642 3-01-93

SATELITE.HOW 18571 3-26-93
SATTAIM.ARC 1860 3-01-93
SATTRACK.INF 5017 3-26-93
TRAK280.ZIP 346847 3-01-93
USAT92B2.ZIP 86782 3-01-93
WU120EXE.ZIP 222368 3-01-93

Directory: /hamradio/satelite/arsene/

ARSENE.TXT 1968 7-19-93
TELEM14G.ZIP 29363 7-19-93
TELEM14H.ZIP 29447 7-19-93
TELEMENG.ZIP 39938 7-19-93
TELEMFRA.ZIP 40680 7-19-93

Directory: /hamradio/sstvfax/

AUTOFAX.ARC 12452 3-01-93
FFT.COM 52096 2-02-93
FFTH.COM 53760 2-02-93
JVFAX50.ZIP 407934 3-01-93
SSTVFAX2.ZIP 28323 3-01-93
SSTVWFAX.TXT 37309 2-02-93
WEFAX.ARC 35968 3-01-93
WXRDR22.ARC 98944 3-01-93

Directory: /hamradio/swl/

FAQ_SWL.TXT 21936 2-02-93
SWL114.ZIP 302908 3-01-93
SWL_INFO.TXT 20666 2-02-93

Directory: /hamradio/technici/

TEC22.ZIP 74516 6-18-93
TECHTEST.EXE 148542 1-11-92

Directory: /hamradio/utility/

ARJ230NG.EXE 200704 6-18-93
ARJ241A.EXE 223856 8-07-93
BINHEX.HQX 89586 8-17-93
BOOZ.ZIP 12639 6-18-93
COMP16.ZIP 16102 6-18-93
COMP430D.ZIP 20241 6-18-93
FILTER11.ARC 55936 3-01-93
INTMOD60.ARC 11902 3-01-93
JLEM.ZIP 14846 2-02-93
OHMSLAW.ARC 22197 3-01-93
PDZIP.ZIP 63473 6-18-93
PKUNZIP.EXE 23528 3-15-90
PKUNZIP2.EXE 28806 5-17-93
QEXTRACT.ZIP 43123 6-18-93

RC85PR15.ZIP 50983 3-01-93
RFTOOLS.ARC 144799 3-01-93
UNARJ230.ZIP 39074 6-18-93
UNZIP.EXE 26838 6-18-93
UNZIP41.ARC 121470 6-18-93
UNZIP41.EXE 21933 6-18-93
UUDECODE.BAS 5709 3-28-93
UUDECODE.C 5565 3-28-93
UUDECODE.DOC 519 3-28-93
UUEXE515.ZIP 33603 3-06-93
WHERITIS.ARC 30943 3-01-93
ZIP.EXE 59260 6-18-93
ZIP10EX.ZIP 158335 6-18-93
ZOO210.EXE 55721 6-18-93

Directory: /hamradio/vlf/

1750MTR.TXT 6532 2-02-93

595. Putting a C=64 on the air

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-14 05:01:36 UTC
From: blumb@sage.cc.purdue.edu
Message-ID: <CEvFAo.EEq@mentor.cc.purdue.edu>
Source record: 51381

Hi everyone!

I've passed my technician exam...awaiting the license...

I've got a few questions about putting a Commodore 64 on the air for packet.....

I'll be using a Radio Shack HTX202, with an outside antenna. (prolly 5/8 wave... haven't built it yet, tho)

--- what are your recommendations on equipment/software?

(Please keep in mind I intend to be upgrading to a x86 platform in the next two years, so I'd like to get a TNC that will make the transition with me!!!)

Please direct all replies via email, as I'm unable to read news frequently, and often wind up logging in after peoples articles expire at this site.

My address: blumb@sage.cc.purdue.edu

Thanks, and 73
-bill

--
Bill Blum blumb@sage.cc.purdue.edu Purdue University, W. Lafayette, IN
N9???--- passed exam on 10/3

596. Re: Has anyone put a "login:" on the air? (XENIX)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-14 05:30:19 UTC
From: jgd@dixie.com
Message-ID: <y!_1h5_@dixie.com>
Source record: 51243

lkollar@nyx.cs.du.edu (Larry Kollar) writes:

>Soon and very soon -- perhaps by this weekend -- my house will once again
>proudly become a DOS-free zone as I replace DOS with XENIX on my system.

Congranulations! DOSlessness feels good, doesn't it?

>Just for grins, I'd like to hook up my TNC and provide full shell access
>over the air. However, I have reason to believe that it's not a simple
>matter of plugging in the TNC, setting up a getty, and watching the fun.
>(A friend of mine tried it on his system, and he had some trouble.)

>Has anyone successfully done this, and if so, how?

Yes, and it should be just that simple. set the TNC to binary, silent
(so it doesn't try to log in user "*** Connected" and assert DCD upon
upon connect. Been way to long for me to remember the register settings.
You'll need to configure gettydefs as if you were working on a line tty
unless you want to go transparent and suffer the keystroke-by-keystroke
delays. Also remember, of course, that all keystrokes including
passwords go over the air in plain text.

73 John

--
John De Armond, WD4OQC | For a free sample magazine, send
Performance Engineering Magazine(TM) | a digest-size 52 cent SASE
Marietta, Ga "Hotrods'n'computers" | (Domestic) to PO Box 669728
jgd@dixie.com "What could be better?" | Marietta, GA 30066
Email may be published at my sole discretion.

597. FTP site for JNOS

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-14 07:00:00 UTC
From: Burt.Kaufman@f40.n382.z1.fidonet.org
Message-ID: <750649019.AA00152@afarm.uucp>
Source record: 51258

I can confirm that executable and source versions of JNOS are available
on ucsd.edu. The latest "official" release of JNOS (not beta test
software) is JNOS v1.08df. You will find that version (and some beta
versions) in: /hamradio/packet/tcpip/incoming
In /hamradio/packet/tcpip/jnos, you can find version 1.07* files
Look for sources as jnos107b.zip files, executables as jnos107b.exe,
and jnosdoc.zip for the documentation.

[If you are wanting to use the same version Jeffrey Sloman N1EWO
is talking about in 73 Magazine, this month he is talking about
1.07b; last month he mentioned 1.08c, which I couldn't find. Changes
seem to be fairly incremental bugfixes, so anything before 1.10
is probably good.]

Also, although I have not confirmed this personally, it is reported
that versions of JNOS are available on this system: wg7j.ece.orst.edu
I don't have any idea what directory these would be in.

As you probably know, ucsd.edu is a well known system, and should be
easy to contact. The other system is, I presume, the home system of
the primary developer of JNOS, WG7J. Good luck with getting set up.......

Burt N5SYY

... "The great joy of travel is meeting people." - Genghis Khan
___ Blue Wave/QWK v2.12

598. re: Public apology messag

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-14 07:19:28 UTC
From: N0LQT@HOLONET.NET
Message-ID: <CEvLoI.E6u@iat.holonet.net>
Source record: 51382

Kf> Has anyone read the Public Apology message sent to the guy in Ohio
Kf> who was upset that a sysop deleted one of his mod file messages. It
Kf> had something to do with the modification of scanners to receive
Kf> Cellular Phone freqs I beleive. The guy was threating to sue AND
Kf> attempt to get the BBS sysop's liscense pulled becasue his message got
Kf> deleted. He feels that because some one who runs a PBBS (Public BBS
Kf> - his words) is legally obligated to display and forward any message
Kf> that comes into their system. Any comments? Does this flake xxxxx
Kf> ... rest deleted for bandwidth.

No I hadn't seen this particular issue. Interesting that it
should occur now. I'm on the board of a local repeater organization
here in central Kansas. We operate a number of repeaters in
different bands around the area. Just last month we were forced to
refund the dues of an amateur and request that he no longer use any
of our repeaters. This is the first such incident in the state and
it is causing quite a flap. He has gone on to other systems and
threatened various board members (big mistake on his part since two
of those threatened are Police Officers) and in general, made noise
about suing the board and club members for kicking him off the
repeater.

Basicly, he was removed from the system for improper operations
and some possibly illegal operations. The man had on numerous
occasions been helped, shown the light, given advice, and threatened
about his operations. The trustee once had to shut the repeater down
when he got into a shouting argument with his wife (also a ham) over
the air. After repeated attempts to "help him along" we sent him a
letter detailing several of the incidents and required him to respond
in writting as to what he would do to improve his operating practices
in the future or face expulsion. He never did respond, but made open
threats of violence against the board, ON THE REPEATER! BTW, all our
repeaters are listed and maintained as "Open" repeaters and they will
remain so.

The argument used in the expulsion was although the system
is billed as "open" it is not a "Public Accomodation" nor a "Radio
Common Carrier" under the law. The repeater, although owned by the
group carries the call of the trustee and he would bear the legal
burden for any illegal operations. We felt that it was within our
power to refuse the use of the groups resources to anyone as long as
it did not violate any discrimination laws. In this case it did not.

I think the same could be said for a Packet Bulletin Board
System. It is not a public accomodation, nor a radio common carier.

Use of the system is open only to licensed amateurs and further limited by choice of the control operator, as long as it is not based on any discriminitory practices prohibited under state or federal laws. We don't intend to apologize nor do we intend to allow him to use the repeaters unless he can show that his practices have improved. Many BBS programs for packet (and some TNCs now) have a "LID" list feature that will refuse a connect from certain calls. How would this be different than deleting a message entered on another system?

Seeyaalllaterbye... JoeP.
de N0LQT (Joe Palmer) from Newton, Ks. 67114 On a TCP/IP Network BBS

EMAIL Addressing:
Packet: n0lqt@n0lqt.#scks.ks.usa.na LLBBS: Joe Palmer @ (316)-284-2421
Compuserve: Joe Palmer (73327,760) InterNet: n0lqt@holonet.net
==========

... 38°03'N 97°22'W (plate tectonics notwithstanding)
___ Blue Wave/QWK v2.12

599. Re: AX.25 protocol with Linux?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-14 07:44:11 UTC
From: terryd@extro.ucc.su.OZ.AU
Message-ID: <terryd.750584651@extro.ucc.su.OZ.AU>
Source record: 51383

luru@stekt6.oulu.fi (Ari Husa) writes:

>> All you will need is a tnc capable of kiss operation initially.

>Sounds cool. I wonder if anyone is working with the Ottawa PI board
>driver yet?

I have two, and am of half a mind to send Fred (the guy developing the code) one specifically for him to write support for it, alternatively I will have a hack at it. I'm not whether I am competent enough, only one way to find out :-)

Terry

--
--- Terry Dawson, terryd@extro.ucc.su.oz.au

600. Re: Public Apology

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-14 10:43:19 UTC
From: eeyimkn@unicorn.nott.ac.uk
Message-ID: <29jag7$d5v@unicorn.ccc.nottingham.ac.uk>
Source record: 51385

In article <CEu5Mn.F5p@hawnews.watson.ibm.com> pcr@vnet.ibm.com (phil reed) writes:
>In a later packet message, KF8TV abjectly apologizes for his earlier
>message. I don't know if he's BSing or what, but he *seems* to be sorry for
>the threat of calling in the lawyers.
>
>I was all set to flame him on packet, but I saw several messages in
>response that were, while pointing out his problems, quite kind (especially
>in comparison to the messages here).
>
>I'd say, let's relax on this.

Yeah. Looks like everybody else has sorted him out already, and he's seen the
error of his ways. Maybe it's just a misunderstanding..
Can anyone post the later apology?

73 Mike

--
+--------------------------- O Mike Knell, University of Nottingham, UK -+
| Nevertheless.. -/ \- Internet: eeyimkn@unicorn.nott.ac.uk |
| the Turtle Moves! -_/- AX25: g7gpa@gb7bad.#23.gbr.eu |
+--M.T.V. - GET OFF THE AIR!-- | AMPRnet: mpk@hobbes.g7gpa.ampr.org -------+

601. Re: Z-80B CPU and SIO/0 Source?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-14 11:37:15 UTC
From: znha@ve3ppe.isis.org
Message-ID: <CEvxM4.332@ve3ppe.isis.org>
Source record: 51256

In article <750312143snx@llondel.demon.co.uk>, dave@llondel.demon.co.uk wrote:
>In article <F3k8ac1w165w@lakes.trenton.sc.us> jcox@lakes.trenton.sc.us (John Cox) writes:
>>
>>I'm in the process of upgrading an MFJ-1274 TNC to run TheNet X1J. In
>>order to switch to the higher speed clock (4.9 MHz), I understand that I
>>need to install a "B" series (6Mhz) Z-80 CPU and SIO/0 chip. I have
>> [trimmed]
>If you have 'A' versions, try those at the higher speed... you may well
>find that they work. If you are putting the TNC on a remote site then get
> [trimmed]

I've got TheNet X1H running (J is in a prom, getting ready) on a stock
1270. As Dave suggested, they can work nicely. Recommend trying it,
as it can save bucks.

The only "gotcha" I've heard of, is an inability to properly reset
after a power cycle. To verify this, I provoked the tnc prior to
installation, and sure enough, could get it to stall on POR even with
standard (supplied) crystal and processor/sio. A gell-cell now
forstalls that. Otherwise, it's a nice piece of work!

73, Gord.

602. APLINK latest version?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-14 12:09:03 UTC
From: mark@icsbelf.co.uk
Message-ID: <CEvz34.z2o@icsbelf.co.uk>
Source record: 51387

Anyone got the latest version of APLINK available for ftp?
(I believe it is V7.01)

-mark
--
Mark Willis Internet: mark@icsbelf.co.uk
ICS Computing Group Ltd. Packet: GI0PEZ@GB7TED.#63.GBR.EU
Belfast AmprNet: 44.131.15.3
Northern Ireland

603. Re: Making X1J(or whatever) go at 56 kbaud?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-14 12:10:44 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1993Oct14.121044.2029@ke4zv.atl.ga.us>
Source record: 51240

In article <29334@uugate.wa7slg.ampr.org> ka7oei@uugate.wa7slg.ampr.ORG writes:
>With a 10 MHz TNC2 running X1J (or something similar) will it crank at
>56 kbaud? If not, how fast will it go?
>
>The application is this: We are putting up a 56 kbaud repeater. Attached
>to this repeater will be a 9600 baud port and a 1200 baud port. The 56 kbaud
>data will simply be looped through, and when either the 9600 or the 1200 baud
>port is addressed in some way, packet will be routed through to it.
>
>Other options would be to use a Data Engine, or a Gracilis Packeten. The only
>problem with a DataEngine would be that in our network there would be
>relatively few places (if any other) where it would "fit" and thus, it would
>be the only one. A P10 would be reasonable, but that would be down the road
>(we'd like to get it up and running before "then"...)
>
>The 56 kbaud side (the TNC there) wouldn't really need to do routing, really,
>if it had enough "brains" to let the 1200 baud and 9600 baud TNC's do the
>work and simply "pass on" packets it knew to be for the two other ports.
>
>If there isn't already a way to do this, there is certainly a need for it.

The Packeten is an excellent piece of hardware designed for this job.
We chose to go another way, however, because we couldn't be assured
of a replacement for the Packeten on Saturday night at Walmart after
lightning trashes the one on the mountain. Nor could we easily update
the software from source. So we use cheap clone PCs as routers. We use
a version of NOS as the routing software. You don't need to leave a
keyboard or monitor at the site. All you really need is the motherboard,
a disk controller, a drive, synchronous serial cards for each port, and
a power supply. Works great, costs little.

Gary

--
Gary Coffman KE4ZV |"If 10% is good enough | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | for Jesus, it's good | uunet!rsiatl!ke4zv!gary
534 Shannon Way | enough for Uncle Sam."| emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -Ray Stevens |

604. Re: MacTCP radio driver?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-14 12:26:51 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1993Oct14.122651.2146@ke4zv.atl.ga.us>
Source record: 51241

In article <8092.2cbc32b0@hayes.com> bcoleman@hayes.com (Bill Coleman) writes:
>
>Gary, I don't know if are addressing the question as asked. Do you actually
>know of someone who has the appropriate driver (I think they are called LDEVs)
>for MacTCP and has tried this? Did they run into "packet storm" problems?

The only person I know who has written software to directly generate
AX25 on the Mac is Jack Brindle. But I don't think he's found a way
to interface it directly to the Mac TCP/IP. Last I heard, he was
still using a clone PC in the closet to deal with the packet storm
problem.

The fundamental issue is the setting of the TCP timers. In commercial
TCP offerings designed for high speed local LANs using ethernet or
Appletalk, these timers are set much too short and generate a storm
of TCP resends before the first AX25 level packet has a chance to be
sent and an acknowledge packet *for TCP* received. So this issue is
at a higher level than the driver code. Most TCP timers are adaptive,
and after the first storm they will back off sufficiently. But avoiding
that initial storm requires setting the initial value of the TCP timers
much longer than normal for ethernet. And those timers aren't user
settable as far as I know.

It seems possible that a *kludge* that violates layering could be
added to the AX25 driver to discard TCP resends that are premature
for the channel in use. But that would require maintaining a considerable
amount of *state* in the driver code to implement the kludge. That's
generally a Bad Thing(tm), and also a performance issue. The clean
solution is to allow resetting the TCP timers on an interface basis.
But that requires mucking about with the commercial code. Someone
from Apple might comment on whether there's a way to do this with the
existing code.

Gary
--
Gary Coffman KE4ZV |"If 10% is good enough | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | for Jesus, it's good | uunet!rsiatl!ke4zv!gary
534 Shannon Way | enough for Uncle Sam."| emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -Ray Stevens |

605. Re: Has anyone put a "login:" on the air? (XENIX)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-14 13:38:18 UTC
From: lkollar@nyx.cs.du.edu
Message-ID: <1993Oct14.133818.15054@mnemosyne.cs.du.edu>
Source record: 51389

dbushong@wang.com (Dave Bushong) writes:

[me]
>>Just for grins, I'd like to hook up my TNC and provide full shell access
>>[to Xenix]

>I did this with xenix in '86 or so -- set the TNC to trans mode, and
>disallow multiple connects (unless you want to modify getty() to
>deal with the stream change).

I'll hack on getty later, maybe... actually, I was thinking about a device driver to switch the streams into unique /dev/tncxx thangs. The eventual goal is to get a MUD on-line. :-)

>And the echo situation might be an issue, especially if there is a
>slow throughput situation.

So I turn off echo at the port, and let the TNCs do the echoing... I don't expect many people to try running vi on a 1200 baud LAN -- more than once. :-P

This oughtta be FUN! Thanks for your help!
--
Larry Kollar, KC4WZK | I like CW, but that doesn't mean I think every ham
lkollar@nyx.cs.du.edu | should have to learn it.
"You mean you came back from the dead, to tell me I'm *odd*?"

606. Linux on the air...

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-14 14:36:07 UTC
From: johnr@ms.uky.edu
Message-ID: <CEw5w9.Gx@ms.uky.edu>
Source record: 51242

I have no idea how far along technology is here, but are there people that are giving a login: on the air via a TNC?

I don't know anything about it and I don't own a TNC, but I have a computer at home that is directly connected to the internet and I have a kenwood th78a HT, so if I buy a TNC can I give hams access to my computer?

Is anyone doing this?

Your Pal,
John
--
-=+ John S. Roberts, Jr. 100 McVey Hall Work: 257-2275 +=-
-=+ University of Kentucky Home: 272-1417 - FAX: 272-7105 +=-

607. Re: re: Public Apology

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-14 15:27:41 UTC
From: ben@nj8j.atl.ga.us
Message-ID: <u9NeBc1w165w@nj8j.atl.ga.us>
Source record: 51265

sfarlow@NeoSoft.com (Stephen Farlow) writes:

> AGAIN, amateur radio is a HOBBY and is VOLUNTEER. As such, anyone wh
> CHOOSES to run a PBBS has full rights to control what leaves his PBBS
> or gets posted there.That goofy lawyer and the guy who hired him ought
> to apologize to that SYSOP for their behavior.

Actually, he has. There was a followup apology from the original complainer
posted to packet not long ago.

Ben

```
+-------------------------------------+--------------------------------+
| Ben Coleman NJ8J | "All that is not eternal is |
| AX.25: NJ8J@W4QO.#EAL.#ATL.GA.USA.NA | eternally out of date." |
| Internet: ben@nj8j.atl.ga.us | C. S. Lewis |
+-------------------------------------------------------------------------+
```

608. Re: Macintosh & Packet: Need HELP!

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-14 16:05:43 UTC
From: jvp@tools1.ee.iastate.edu
Message-ID: <jvp.750614743@tools1.ee.iastate.edu>
Source record: 51245

In <1993Oct12.165324.1@aurora.alaska.edu> fsrla@aurora.alaska.edu writes:

>Hello, I'm new to this area and was wondering if
>anyone could tell me what they think would be a
>cheap, but affective Packet set-up for a Macintosh
>running System 7. I don't see much talk about using
>a Mac for packet, but it's the only computer in our
>house.

I've written a program called Savant. Savant is a multi-window,
multi-connection packet radio communications program for the Macintosh.
Using Savant and a packet modem like the PacketMac modem, is the least
expensive way into packet radio, and gives you the power of a well-written
Macintosh program at the same time!

Features include:

Written specifically for Macintosh. (not a port from DOS)
Supports multiple simultaneous connections each in its own window
Change "channels" quickly by simply switching windows
Simultaneous transmission and reception of packets
in every session window
Icons and fields in each window display that session's status
- Packets outstanding and sent, retries, round trip time
Stations Heard window displays the last 64 stations heard,
and continuously updates the list while the window is open
Monitor window decodes and shows all packet traffic
Implements the full Mac user interface, including:
- Scroll bars in session windows (view previous traffic)
- Edit menu with Undo, Cut, Copy and Paste commands
- Saving and Printing of all or part of any session window
- User re-sizeable split windows
Acts as a fully functional digipeater including the ability to
assign an alias
Operates with any TNC that implements KISS mode
Fully compatible with Aaron Wohl's SoftKiss and
Sigma Design Associates' PacketMac Modem
System 7 compatible, 32 bit and cache clean

System Requirements:
Mac Plus or newer
System 6.0.5 or newer
512K or more of spare memory

A demo version is available upon request.

--
+---+
| Jim Van Peursem - Dept of EE and CprE - Iowa State University |
| Ames, IA 50011 - internet: jvp@iastate or tools1.ee.iastate.edu |
+---+

609. Re: Putting a C=64 on the air

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-14 16:17:37 UTC
From: bat@gdstech.GRUMMAN.COM
Message-ID: <BAT.93Oct14111738@gdstech.GRUMMAN.COM>
Source record: 51244

You can run an AEA PK-64 quite nicely on your C64, but it wont run on anything else (like a 486). So, you can run any of the rs-232 type TNCs (AEA, KAM, Paccom), but you need a TTL-to RS232 converter for the C64. Everything else you have there sounds good. Have fun!

--

--
* Pat Masterson D12-25 | KE2LJ@KC2FD *
* Grumman Data Systems | 516-346-6316. *
* Bethpage, NY 11746 | bat@gdstech.grumman.com *

610. Re: Multiple TNCs on same frequency

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-14 16:34:42 UTC
From: kb7uv@panix.com
Message-ID: <29jv32$iq@panix.com>
Source record: 51246

In article <1993Oct13.170548.5219@combdyn.com>,
Lawrence *The Dreamer* Chen <lawrence@combdyn.com> wrote:
>Is there anybody running more than one TNC on the same frequency at their
>QTH?
>
>I'm running NOS, and I like it a lot. Now I've been asked about putting up
>a fuller Packet BBS.
>
>Since I can't see anyway for the two packages to share the same TNC and radio,
>I was wondering if running two TNCs, two Radios, and two Antennas would work..
>with both on the same frequency....or could two TNCs be wired to the same
>radio?
>

The esiest way to do this is with an NX2P Radio Multiplier. These units
let multiple TNCs share a single radio. I use one at my shack and it
works perfectly.

I think these are available from PacComm. Bill Slack, NX2P, can be
contacted directly as well:

NX2P Electronics: 201-729-NX2P

This should let you do exactly what you want, but with a single radio!

73, Andy
--
_____ Andrew Funk, KB7UV _____
| Chair, Radio Amateur Telecommunications Society (RATS) |
| ENG Editor/Microwave Control, WCBS-TV Channel 2 News, New York |
| Internet: kb7uv@panix.com Packet: kb7uv@kb7uv.#nli.ny.usa |

611. How to get started in PACKET

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-14 17:35:14 UTC
From: garys@Ingres.COM
Message-ID: <1993Oct14.173514.21312@pony.Ingres.COM>
Source record: 51247

I've been considering getting into packet, but am at a loss as to where to start.
Could someone send me the info (about software, tnc, etc) necessary to get starting?

Thanks,
Gary KE6BYU

612. Re: Can I build TNC by myself?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-14 18:15:04 UTC
From: w6swe@w6swe.tapr.ORG
Message-ID: <303@w6swe.tapr.org>
Source record: 51249

In Ham-Digital Digest #72, Janne Snabb writes:
>I am interested in building a TNC by myself (not just the modem). Does
>anyone know any sources for ready designed schematics & software.

TAPR offers the p.c. board for the TNC-2 with printed schematics
and a disk containing the assembly and operation manuals plus
EPROM images for $30.00. Programmed EPROMs are also available.
Contact:
Tucson Amateur Packet Radio
P.O. Box 12925
Tucson, AZ 85732
FAX 1-602-749-5636
Email: tapr@tapr.org

Bob Nielsen, W6SWE Internet: w6swe@tapr.org
Tucson, AZ AX.25: w6swe@kc7cg.az.usa.na
Amateur IP: 44.124.12.16

613. Re: Multiple TNCs on same frequency

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-14 18:20:57 UTC
From: dave@llondel.demon.co.uk
Message-ID: <750648057snx@llondel.demon.co.uk>
Source record: 51251

In article <1993Oct13.170548.5219@combdyn.com> lawrence@combdyn.com (Lawrence *The Dreamer* Chen) writes:
>Is there anybody running more than one TNC on the same frequency at their
>QTH?
>
>I'm running NOS, and I like it a lot. Now I've been asked about putting up
>a fuller Packet BBS.
>
>Since I can't see anyway for the two packages to share the same TNC and radio,
>I was wondering if running two TNCs, two Radios, and two Antennas would work..
>with both on the same frequency....or could two TNCs be wired to the same
>radio?
>
>Having NOS and the BBS talk to each other over the air would probably be out
>of the question, aside from the fact that when one is talking the other is
>deaf (desensed).
>
>I know that the main packet BBS in town ran on two separate frequencies, but
>it couldn't talk out on both at the same time.....It couldn't hear on the
>other frequency while talking on the other one either. At least it couldn't,
>now the radios are tuned tight enough that doesn't seem to be a problem
>anymore.

It is quite possible to run NOS and an AX25 packet BBS on the same machine.
If you run the BPQ network switch on the PC and run Desqview, you can get
NOS to coexist quite happily in a Desqview window with BBS software in other
windows. I have successfully run RLI/YFB/FBB software alongside various
versions of NOS in this way.

Dave
--

****
* G4WRW @ GB7WRW.#41.GBR.EU AX25 * Start at the beginning. Go on *
* dave@llondel.demon.co.uk Internet * until the end. Then stop. *
* g4wrw@g4wrw.ampr.org Amprnet * (the king to the white rabbit) *
****

614. Re: TCP/IP starup cmds for MFJ TNC 2

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-14 18:21:57 UTC
From: w6swe@w6swe.tapr.ORG
Message-ID: <305@w6swe.tapr.org>
Source record: 51250

In Ham-Digital Digest #72, Andrew Mitz (arm@helix.nih.gov) writes:
>What is the series of commands the MFJ needs to properly
>initialize it for TCP/IP packet radio?

You need to give the KISS ON command, followed by the RESTART command. The three red LEDs will blink three times (assuming you have 32K of RAM) which indicate that you are in KISS mode. To get out of KISS mode from NOS, issue the command

param <iface> 255

Bob Nielsen, W6SWE Internet: w6swe@tapr.org
Tucson, AZ AX.25: w6swe@kc7cg.az.usa.na
Amateur IP: 44.124.12.16

615. ANNOUNCEMENT: TENNET at Chattanooga Hamfest 10/23/93

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-14 18:43:00 UTC
From: ggjns@perot.mtsu.edu
Message-ID: <29k6jk$7p5@perot.mtsu.edu>
Source record: 51248

TENNET
The TENnesee NETwork
State of Tennessee Amateur Packet Radio Network

TENNET is a project to link the State of Tennessee with a high speed packet radio backbone, from Memphis to Mountain City and all regions in between. This involved effort is about to proceed from the phase of conception to the point of formally organizing as a not-for-profit, 501(c)(3) entity.

TENNET's formal organization shall come at the Chattanooga, TN Hamfest, located downtown at the Chattanooga Convention Center, on Saturday, October 23rd, 1993. Time for the meeting shall be at 2:00 PM. All persons or groups interested in better packet connectivity across the Volunteer State are encouraged to attend and participate. Topics to be discussed shall include but are not limited to the forming of a constitution, site configurations, and funding. Officers for this organization shall be nominated and elected during this meeting.

TENNET seeks to provide a data "superhighway", independent of protocol or content from the end-user's perception, for packet radio traffic. Information transmitted into a network node shall be routed to its destination quickly over a backbone of high-speed (56 K bits/sec. & up) packet links situated throughout the state.

Talk-in to the Chattanooga Hamfest is via the 146.19/.79 and 444.1/449.1 repeaters for directions and information.

Participants in the TENNET organizational effort are connected via an E-mail mailing list. This list may be addressed by mailing a message to "tennet-l@knuth.mtsu.edu". Subscriptions to this list may be arranged by mailing to "listserv@knuth.mtsu.edu" with an empty subject line and a message-body of "SUBSCRIBE TENNET-L your_human_name" beginning in column 1. Persons interested in contributing to the discussion of this effort are encouraged to participate.

We hope to see you at the meeting; we need the active participation of as many packet enthusiasts and existing groups as possible to make this networking effort a collaborative success.
--
John N Schmidt KD4EAI, Lab Director + 615-898-5561 phone or 615-898-5592 FAX
Middle Tennessee State University ++ ggjns@knuthmtsu.edu via Internet Email
1500 Greenland Drive, PO Box 135 +++ MTSU Center for Remote Sensing and GIS
Murfreesboro, TN 37132-0135 USA ++++ Department of Geography and Geology
---- 35d 50m 22s North Latitude, 86d 22m 00s West Longitude, 640 ft MSL ----

616. Re: Multiple TNCs on same frequency

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-14 19:45:36 UTC
From: kf5mg@vnet.ibm.com
Message-ID: <CEwK81.1tB3@hawnews.watson.ibm.com>
Source record: 51263

In <1993Oct13.170548.5219@combdyn.com>, lawrence@combdyn.com (Lawrence *The Dreamer* Chen) writes:
>I'm running NOS, and I like it a lot. Now I've been asked about putting up
>a fuller Packet BBS.
>
>Since I can't see anyway for the two packages to share the same TNC and radio,
>I was wondering if running two TNCs, two Radios, and two Antennas would work..
>with both on the same frequency....or could two TNCs be wired to the same
>radio?

What other BBS are you going to run and how? Are you going to use seperate systems or run both programs on the same system? If your going to use the same box, you could run BPQ and let it control the TNC and radio. Most BBSes and NOS will talk to a BPQ switch instead of their own TNCs so you have NOS and the BBS talk to BPQ and let it handle the radio and TNC.

If your going to use two systems, you could run BPQ and the BBS on one and cable up the NOS system using a null modem cable and let it talk to the bbs via the BPQ switch. I think that will work.

>Having NOS and the BBS talk to each other over the air would probably be out
>of the question, aside from the fact that when one is talking the other is
>deaf (desensed).
Correct. The BQP switch will let them talk internally.

73's de Jack - kf5mg
AX25net - kf5mg@kf5mg.#dfw.tx.usa.na - (817) 962-4409
Internet - kf5mg@kf5mg.ampr.org - 44.28.0.14
Worknet - kf5mg@vnet.ibm.com

617. Re: Public Apology

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-14 20:17:54 UTC
From: ben@nj8j.atl.ga.us
Message-ID: <Jo2eBc2w165w@nj8j.atl.ga.us>
Source record: 51270

eeyimkn@unicorn.nott.ac.uk (M. Knell) writes:

> In article <4653@eram.esi.COM.AU> dave@esi.COM.AU (Dave Horsfall) writes:
> >So, who is this prawn, "Randy KF8TV @ W8HHF" ? Some wanna-be lawyer?
> >Are there any more like him over there?
> >
> Anybody feel like mailstorming him? But then again, maybe it's just not worth
> loading the pacsats and HF gateways just for this bozo's sake..

Evidently, he's already been mailstormed enough. He's posted an apology to
the packet network, and has even taken a self-imposed month away from packet
as a result of his original posting. Methinks he's seen the light.

Ben

+--------------------------------------+---------------------------------+
Ben Coleman NJ8J	"All that is not eternal is
AX.25: NJ8J@W4QO.#EAL.#ATL.GA.USA.NA	eternally out of date."
Internet: ben@nj8j.atl.ga.us	C. S. Lewis
+--------------------------------------+---------------------------------+

618. WX FAX with PK232?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-14 20:54:40 UTC
From: kb2glo@cbnewsj.cb.att.com
Message-ID: <CEwnF8.42y@cbnewsj.cb.att.com>
Source record: 51253

I'd like to get some WX FAX with my AEA PK232 however I don't have any
software to do that. Is AEA the only source of software to receive
WX FAX. Also anybody have a good list of frequencies?

Thanks and 73, Tom KB2GLO.

--
Tom Kenny, KB2GLO
UUCP: ...!att!lzusp!tek Internet: tek@lzusp.att.com
Packet Radio: KB2GLO@KB2GLO.NJ.USA Voice Telephone: 908-576-3888

619. RE: Call for info on Paccom TNCs

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-14 21:05:38 UTC
From: jnewgas@cix.compulink.co.uk
Message-ID: <memo.818800@cix.compulink.co.uk>
Source record: 51252

You ask for info on HandiPacket by PacComm. I have one and it does all that I ask of it ... competent 1200 baud packet and reliable KISS mode for TCP/IP.
I run it with the radio squwlch set to minimum and it copes well. IT has only one funny. If the Handipacket is turned on after the radio is turned on then it can sometimes lock up. Turning the radio and TNC off and switching the TNC on first cures the problem. It is probably soemthing to do with the Carrier Detection state logic.

Does this happen on any other TNC's ?

620. Re: Has anyone put a "login:" on the air? (XENIX)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-14 23:04:37 UTC
From: cmoore@rose.hp.com
Message-ID: <29klu5$jf9@hpchase.rose.hp.com>
Source record: 51254

Larry Kollar (lkollar@nyx.cs.du.edu) wrote:

: .... The eventual
: goal is to get a MUD on-line. :-)

I've considered doing this as well. In asking around a bit I got a suggestion from someone who has one running. He suggested having a cheap PC running NOS and acting as a router between Packet and your Xenix box. Have the MUD run on the Xenix box in its normal mode, it talks TCP/IP to the cheap PC, which then routes the connections to packet.

Of course, this does require a second dedicated machine doing the routing.

Note also that I've not actually done this, but it sounded like a good idea to me.

Chris Moore
N6IYS
cmoore@mothra.rose.hp.com

621. Re: MacTCP radio driver?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-15 03:23:54 UTC
From: jackb@mdd.comm.mot.com
Message-ID: <1993Oct15.032354.3943@mdd.comm.mot.com>
Source record: 51255

Hi to Gary, Bill and all my friends in Georgia...

In article <1993Oct14.122651.2146@ke4zv.atl.ga.us> gary@ke4zv.UUCP (Gary Coffman) writes:
>In article <8092.2cbc32b0@hayes.com> bcoleman@hayes.com (Bill Coleman) writes:
>>
>>Gary, I don't know if are addressing the question as asked. Do you actually
>>know of someone who has the appropriate driver (I think they are called LDEVs)
>>for MacTCP and has tried this? Did they run into "packet storm" problems?
>
>The only person I know who has written software to directly generate
>AX25 on the Mac is Jack Brindle. But I don't think he's found a way
>to interface it directly to the Mac TCP/IP. Last I heard, he was
>still using a clone PC in the closet to deal with the packet storm
>problem.

Gary, you know better than that. While still in Atlanta I used a Mac 512K
digital board with KA9Q/MAC code to provide a gateway function between my
local AppleTalk network and the 56K rf network. It worked wonderfully (Alas
there is no 56K network in Seattle, YET). The PC (an old 8 MHz "turbo" XT)
was used to play with things like Minix and other things. I still have the
machine, but haven't turned it on in quite a while. It does provide me with
a pretty good eprom programmer from time to time, however.

>The fundamental issue is the setting of the TCP timers. In commercial
>TCP offerings designed for high speed local LANs using ethernet or
>Appletalk, these timers are set much too short and generate a storm
>of TCP resends before the first AX25 level packet has a chance to be
>sent and an acknowledge packet *for TCP* received. So this issue is
>at a higher level than the driver code. Most TCP timers are adaptive,
>and after the first storm they will back off sufficiently. But avoiding
>that initial storm requires setting the initial value of the TCP timers
>*much* longer than normal for ethernet. And those timers aren't user
>settable as far as I know.

In MacTCP they are not _user_ settable, but they are program settable.
Unfortunately this does not provide a good solution since you would have
to modify each application to handle things. There is good news, however.
The problem has been recognized, and the commercial folks are wanting
to move tcp information over low speed (up to 19.2KB) rf links. This
has already caused some tcp stack implementations to be modified to
use adaptive algorithms. Apple, in fact, has stated that MacTCP 3.0 will
be fully adaptive. They also claim a 1994 release for MacTCP 3.0. Given
their networking folk's recent track record, I tend to believe the date.
By the way, MacTCP's current big timing problem comes from the retry
timing becoming too large quickly. This causes large delays even when

the link is very lightly loaded. The pending 2.0.3 release should go
a long ways to fixing this.

>It seems possible that a *kludge* that violates layering could be
>added to the AX25 driver to discard TCP resends that are premature
>for the channel in use. But that would require maintaining a considerable
>amount of *state* in the driver code to implement the kludge. That's
>generally a Bad Thing(tm), and also a performance issue. The clean
>solution is to allow resetting the TCP timers on an interface basis.
>But that requires mucking about with the commercial code. Someone
>from Apple might comment on whether there's a way to do this with the
>existing code.

I wonder how much of a kludge this might be. I really shudder at the
thought of the link layer interpreting tcp layer information, but there
might be some way of "helping out" the timer negotiations. It's something
that more than we hams are currently interested in ;-).

--
==========
Jack Brindle
ham radio: wa4fib
internet: jackb@mdd.comm.mot.com

622. Re: DJ_580 microphone connector

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-15 04:51:47 UTC
From: martinbw@jackatak.raider.net
Message-ID: <1c4FBc1w165w@jackatak.raider.net>
Source record: 51285

dbraun@ilx049.intel.com (Doug Braun) writes:

> Well, I got a DH-580 and I need to connect it to my TNC. From
> the schematic, I understand how the PTT and audio go on the same
> line. No problem there. BUT, the microphone socket is a (submini)
> STEREO socket, where the middle terminal is is apparently supposed to
> supply 5 volts power to an external speaker-mike. So, if I plug in
> a regular mono submini plug, I will end up shorting this power
> connecton to ground! (thru a 100-ohm resistor). If I used a stereo
> submini plug, and left the middle terminal unconnected, everything
> would be OK. But I haven't seen a stereo submini plug, just mono
> ones.
>
> What does everyone else do? Is there a source for stereo submini plugs?
> Do you just use a mono one and not worry about the power connection?
>
> Thanx,
>
> ---
> Doug Braun Intel Israel, Ltd. M/S: IDC1-41
> Tel: 011-972-4-655069 dbraun@inside.intel.com
>

I built a cable for my KAM tnc and my DJ580. i had similar questions that
went unanswered. I have had good luck using a mono sub-mini. I have AFSK
going thru a .1microFarad capacitor to the Tip as well as PTT thru a
3.9kOhm resistor connected to the tip. The sleeve is connected to ground.
On the audio jack the sleeve is also conected to ground with the tip
connected to Audio (AFSK) in to the tnc.
THis works for me. Your milage may vary.

I hope this helps,

73 de Bruce/KQ4TV

****
* Bruce W. Martin Internet: martinbw@jackatak.raider.net *
* 4558 Brooke Valley Dr. AOL: Dragon16 *
* Hermitage TN 37076-2650 HAM Call: KQ4TV *
* Voice: (615) 872-9942 Work: (615) 244-2022 *
* FAX/MODEM: (615) 885-4182 *
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623. ASCII version of ECPA (interception, stored comm, pen registers)

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In response to a number of requests from different sources, I've compiled and edited an ASCII version of the Electronic Communications Privacy Act, including all amendments to the original Wiretap Act (18 USC 2510 et seq.), the complete chapter on stored communications (18 USC 2701 et seq.), and the amendments to pen-register and trap-and-trace procedures (18 USC 3121 et seq.)

Please let me know if you catch any errors or typos.

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TITLE 18. CRIMES AND CRIMINAL PROCEDURE

PART I. CRIMES

CHAPTER 119. WIRE AND ELECTRONIC COMMUNICATIONS INTERCEPTION AND INTERCEPTION OF ORAL COMMUNICATIONS

Sec. 2510. Definitions

As used in this chapter --

(1) "wire communication" means any aural transfer made in whole or in part through the use of facilities for the transmission of communications by the aid of wire, cable, or other like connection between the point of origin and the point of reception (including the use of such connection in a switching station) furnished or operated by any person engaged in providing or operating such facilities for the transmission of interstate or foreign communications or communications affecting interstate or foreign commerce and such term includes any electronic storage of such communication, but such term does not include the radio portion of a cordless telephone communication that is transmitted between the cordless telephone handset and the base unit;

(2) "oral communication" means any oral communication uttered by a person exhibiting an expectation that such communication is not subject to interception under circumstances justifying such expectation, but such term does not include any electronic communication;

(3) "State" means any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, and any territory or possession of the United States;

(4) "intercept" means the aural or other acquisition of the contents of any wire, electronic, or oral communication through the use of any electronic, mechanical, or other device.

(5) "electronic, mechanical, or other device" means any device or apparatus which can be used to intercept a wire, oral, or electronic communication other than--

(a) any telephone or telegraph instrument, equipment or facility, or any component thereof, (i) furnished to the subscriber or user by a provider of wire or electronic communication service in the ordinary course of its business and being used by the subscriber or user in the ordinary course of its business or furnished by such subscriber or user for connection to the facilities of such service and used in the ordinary course of its business; or (ii) being used by a provider of wire or electronic communication service in the ordinary course of its business, or by an investigative or law enforcement officer in the ordinary course of his duties;

(b) a hearing aid or similar device being used to correct subnormal hearing to not better than normal;

(6) "person" means any employee, or agent of the United States or any State or political subdivision thereof, and any individual, partnership, association, joint stock company, trust, or corporation;

(7) "Investigative or law enforcement officer" means any officer of the United States or of a State or political subdivision thereof, who is empowered by law to conduct investigations of or to make arrests for offenses enumerated in this chapter, and any attorney authorized by law to prosecute or participate in the prosecution of such offenses;

(8) "contents," when used with respect to any wire, oral, or electronic communication, includes any information concerning the substance, purport, or meaning of that communication;

(9) "Judge of competent jurisdiction" means--

(a) a judge of a United States district court or a United States court of appeals; and

(b) a judge of any court of general criminal jurisdiction of a State who is authorized by a statute of that State to enter orders authorizing interceptions of wire, oral, or electronic communications;

(10) "communication common carrier" shall have the same meaning which is given the term "common carrier" by section 153(h) of title 47 of the United States Code;

(11) "aggrieved person" means a person who was a party to any intercepted wire, oral, or electronic communication or a person against whom the interception was directed;

(12) "electronic communication" means any transfer of signs, signals, writing, images, sounds, data, or intelligence of any nature transmitted

in whole or in part by a wire, radio, electromagnetic, photoelectronic or photooptical system that affects interstate or foreign commerce, but does not include--

(A) the radio portion of a cordless telephone communication that is transmitted between the cordless telephone handset and the base unit;

(B) any wire or oral communication;

(C) any communication made through a tone-only paging device; or

(D) any communication from a tracking device (as defined in section 3117 of this title);

(13) "user" means any person or entity who--

(A) uses an electronic communication service; and

(B) is duly authorized by the provider of such service to engage in such use;

(14) "electronic communications system" means any wire, radio, electromagnetic, photooptical or photoelectronic facilities for the transmission of electronic communications, and any computer facilities or related electronic equipment for the electronic storage of such communications;

(15) "electronic communication service" means any service which provides to users thereof the ability to send or receive wire or electronic communications;

(16) "readily accessible to the general public" means, with respect to a radio communication, that such communication is not--

(A) scrambled or encrypted;

(B) transmitted using modulation techniques whose essential parameters have been withheld from the public with the intention of preserving the privacy of such communication;

(C) carried on a subcarrier or other signal subsidiary to a radio transmission;

(D) transmitted over a communication system provided by a common carrier, unless the communication is a tone only paging system communication; or

(E) transmitted on frequencies allocated under part 25, subpart D, E, or F of part 74, or part 94 of the Rules of the Federal Communications Commission, unless, in the case of a communication transmitted on a frequency allocated under part 74 that is not exclusively allocated to broadcast auxiliary services, the communication is a two-way voice communication by radio;

(17) "electronic storage" means--

(A) any temporary, intermediate storage of a wire or electronic communication incidental to the electronic transmission thereof; and

(B) any storage of such communication by an electronic communication service for purposes of backup protection of such communication; and

(18) "aural transfer" means a transfer containing the human voice at any point between and including the point of origin and the point of reception.

Sec. 2511. Interception and disclosure of wire, oral, or electronic communications prohibited

(1) Except as otherwise specifically provided in this chapter any person who--

(a) intentionally intercepts, endeavors to intercept, or procures any other person to intercept or endeavor to intercept, any wire, oral, or electronic communication;

(b) intentionally uses, endeavors to use, or procures any other person to use or endeavor to use any electronic, mechanical, or other device to intercept any oral communication when--

(i) such device is affixed to, or otherwise transmits a signal through, a wire, cable, or other like connection used in wire communication; or

(ii) such device transmits communications by radio, or interferes with the transmission of such communication; or

(iii) such person knows, or has reason to know, that such device or any component thereof has been sent through the mail or transported in interstate or foreign commerce; or

(iv) such use or endeavor to use (A) takes place on the premises of any business or other commercial establishment the operations of which affect interstate or foreign commerce; or (B) obtains or is for the purpose of obtaining information relating to the operations of any business or other commercial establishment the operations of which affect interstate or foreign commerce; or

(v) such person acts in the District of Columbia, the Commonwealth of Puerto Rico, or any territory or possession of the United States;

(c) intentionally discloses, or endeavors to disclose, to any other person the contents of any wire, oral, or electronic communication, knowing or having reason to know that the information was obtained through the interception of a wire, oral, or electronic communication in violation of this subsection; or

(d) intentionally uses, or endeavors to use, the contents of any wire, oral, or electronic communication, knowing or having reason to know that the information was obtained through the interception of a wire, oral, or electronic communication in violation of this subsection;

shall be punished as provided in subsection (4) or shall be subject to suit as provided in subsection (5).

(2)(a)(i) It shall not be unlawful under this chapter for an operator of a switchboard, or an officer, employee, or agent of a provider of wire or electronic communication service, whose facilities are used in the transmission of a wire communication, to intercept, disclose, or use that communication in the normal course of his employment while engaged in any activity which is a necessary incident to the rendition of his service or to the protection of the rights or property of the provider of that service, except that a provider of wire communication service to the public shall not utilize service observing or random monitoring except for mechanical or service quality control checks.

(ii) Notwithstanding any other law, providers of wire or electronic communication service, their officers, employees, and agents, landlords, custodians, or other persons, are authorized to provide information, facilities, or technical assistance to persons authorized by law to intercept wire, oral, or electronic communications or to conduct electronic surveillance, as defined in section 101 of the Foreign Intelligence Surveillance Act of 1978 if such provider, its officers, employees, or agents, landlord, custodian, or other specified person, has been provided with--

(A) a court order directing such assistance signed by the authorizing judge, or

(B) a certification in writing by a person specified in section 2518(7) of this title or the Attorney General of the United States that no warrant or court order is required by law, that all statutory requirements have been met, and that the specified assistance is required, setting forth the period of time during which the provision of the information, facilities, or technical assistance is authorized and specifying the information, facilities, or technical assistance required. No provider of wire or electronic communication service, officer, employee, or agent thereof, or landlord, custodian, or other specified person shall disclose the existence of any interception or surveillance or the device used to accomplish the interception or surveillance with respect to which the person has been furnished an order or certification under this subparagraph, except as may otherwise be required by legal process and then only after prior notification to the Attorney General or to the principal prosecuting attorney of a State or any political subdivision of a State, as may be appropriate. Any such disclosure, shall render such person liable for the civil damages provided for in section 2520. No cause of action shall lie in any court against any provider of wire or electronic communication service, its officers, employees, or agents, landlord, custodian, or other specified person for providing information, facilities, or assistance in accordance with the terms of a court order or certification under this chapter.

(b) It shall not be unlawful under this chapter for an officer, employee, or agent of the Federal Communications Commission, in the normal course of his employment and in discharge of the monitoring

responsibilities exercised by the Commission in the enforcement of chapter 5 of title 47 of the United States Code, to intercept a wire or electronic communication, or oral communication transmitted by radio, or to disclose or use the information thereby obtained.

(c) It shall not be unlawful under this chapter for a person acting under color of law to intercept a wire, oral, or electronic communication, where such person is a party to the communication or one of the parties to the communication has given prior consent to such interception.

(d) It shall not be unlawful under this chapter for a person not acting under color of law to intercept a wire or oral communication where such person is a party to the communication or where one of the parties to the communication has given prior consent to such interception unless such communication is intercepted for the purpose of committing any criminal or tortious act in violation of the Constitution or laws of the United States or of any State.

(e) Notwithstanding any other provision of this title or section 705 or 706 of the Communications Act of 1934 , it shall not be unlawful for an officer, employee, or agent of the United States in the normal course of his official duty to conduct electronic surveillance, as defined in section 101 of the Foreign Intelligence Surveillance Act of 1978, as authorized by that Act.

(f) Nothing contained in this chapter or chapter 121, or section 705 of the Communications Act of 1934, shall be deemed to affect the acquisition by the United States Government of foreign intelligence information from international or foreign communications, or foreign intelligence activities conducted in accordance with otherwise applicable Federal law involving a foreign electronic communications system, utilizing a means other than electronic surveillance as defined in section 101 of the Foreign Intelligence Surveillance Act of 1978, and procedures in this chapter and the Foreign Intelligence Surveillance Act of 1978 shall be the exclusive means by which electronic surveillance, as defined in section 101 of such Act, and the interception of domestic wire, oral, or electronic communications may be conducted.

(g) It shall not be unlawful under this chapter or chapter 121 of this title for any person--

(i) to intercept or access an electronic communication made through an electronic communication system that is configured so that such electronic communication is readily accessible to the general public;

(ii) to intercept any radio communication which is transmitted--

(I) by any station for the use of the general public, or that relates to ships, aircraft, vehicles, or persons in distress;

(II) by any governmental, law enforcement, civil defense, private land mobile, or public safety communications system, including police and fire, readily accessible to the general public;

(III) by a station operating on an authorized frequency within the bands allocated to the amateur, citizens band, or general mobile radio services; or

(IV) by any marine or aeronautical communications system;

(iii) to engage in any conduct which--

(I) is prohibited by section 633 of the Communications Act of 1934; or

(II) is excepted from the application of section 705(a) of the Communications Act of 1934 by section 705(b) of that Act;

(iv) to intercept any wire or electronic communication the transmission of which is causing harmful interference to any lawfully operating station or consumer electronic equipment, to the extent necessary to identify the source of such interference; or

(v) for other users of the same frequency to intercept any radio communication made through a system that utilizes frequencies monitored by individuals engaged in the provision or the use of such system, if such communication is not scrambled or encrypted.

(h) It shall not be unlawful under this chapter--

(i) to use a pen register or a trap and trace device (as those terms are defined for the purposes of chapter 206 (relating to pen registers and trap and trace devices) of this title); or

(ii) for a provider of electronic communication service to record the fact that a wire or electronic communication was initiated or completed in order to protect such provider, another provider furnishing service toward the completion of the wire or electronic communication, or a user of that service, from fraudulent, unlawful or abusive use of such service.

(3)(a) Except as provided in paragraph (b) of this subsection, a person or entity providing an electronic communication service to the public shall not intentionally divulge the contents of any communication (other than one to such person or entity, or an agent thereof) while in transmission on that service to any person or entity other than an addressee or intended recipient of such communication or an agent of such addressee or intended recipient.

(b) A person or entity providing electronic communication service to the public may divulge the contents of any such communication--

(i) as otherwise authorized in section 2511(2)(a) or 2517 of this title;

(ii) with the lawful consent of the originator or any addressee or intended recipient of such communication;

(iii) to a person employed or authorized, or whose facilities are used, to forward such communication to its destination; or

(iv) which were inadvertently obtained by the service provider and which appear to pertain to the commission of a crime, if such divulgence is made to a law enforcement agency.

(4)(a) Except as provided in paragraph (b) of this subsection or in subsection (5), whoever violates subsection (1) of this section shall be fined under this title or imprisoned not more than five years, or both.

(b) If the offense is a first offense under paragraph (a) of this subsection and is not for a tortious or illegal purpose or for purposes of direct or indirect commercial advantage or private commercial gain, and the wire or electronic communication with respect to which the offense under paragraph (a) is a radio communication that is not scrambled or encrypted, then--

(i) if the communication is not the radio portion of a cellular telephone communication, a public land mobile radio service communication or a paging service communication, and the conduct is not that described in subsection (5), the offender shall be fined under this title or imprisoned not more than one year, or both; and

(ii) if the communication is the radio portion of a cellular telephone communication, a public land mobile radio service communication or a paging service communication, the offender shall be fined not more than $ 500.

(c) Conduct otherwise an offense under this subsection that consists of or relates to the interception of a satellite transmission that is not encrypted or scrambled and that is transmitted--

(i) to a broadcasting station for purposes of retransmission to the general public; or

(ii) as an audio subcarrier intended for redistribution to facilities open to the public, but not including data transmissions or telephone calls,

is not an offense under this subsection unless the conduct is for the purposes of direct or indirect commercial advantage or private financial gain.

(5)(a)(i) If the communication is--

(A) a private satellite video communication that is not scrambled or encrypted and the conduct in violation of this chapter is the private viewing of that communication and is not for a tortious or illegal purpose or for purposes of direct or indirect commercial advantage or private commercial gain; or

(B) a radio communication that is transmitted on frequencies allocated under subpart D of part 74 of the rules of the Federal Communications Commission that is not scrambled or encrypted and the conduct in violation of this chapter is not for a tortious or illegal purpose or for purposes of direct or indirect commercial advantage or private commercial gain,

then the person who engages in such conduct shall be subject to suit by the Federal Government in a court of competent jurisdiction.

(ii) In an action under this subsection--

(A) if the violation of this chapter is a first offense for the person under paragraph (a) of subsection (4) and such person has not been found liable in a civil action under section 2520 of this title, the Federal Government shall be entitled to appropriate injunctive relief; and

(B) if the violation of this chapter is a second or subsequent offense under paragraph (a) of subsection (4) or such person has been found liable in any prior civil action under section 2520, the person shall be subject to a mandatory $ 500 civil fine.

(b) The court may use any means within its authority to enforce an injunction issued under paragraph (ii)(A), and shall impose a civil fine of not less than $ 500 for each violation of such an injunction.

Sec. 2512. Manufacture, distribution, possession, and advertising of wire, oral, or electronic communication intercepting devices prohibited

(1) Except as otherwise specifically provided in this chapter, any person who intentionally--

(a) sends through the mail, or sends or carries in interstate or foreign commerce, any electronic, mechanical, or other device, knowing or having reason to know that the design of such device renders it primarily useful for the purpose of the surreptitious interception of wire, oral, or electronic communications;

(b) manufactures, assembles, possesses, or sells any electronic, mechanical, or other device, knowing or having reason to know that the design of such device renders it primarily useful for the purpose of the surreptitious interception of wire, oral, or electronic communications, and that such device or any component thereof has been or will be sent through the mail or transported in interstate or foreign commerce; or

(c) places in any newspaper, magazine, handbill, or other publication any advertisement of--

(i) any electronic, mechanical, or other device knowing or having reason to know that the design of such device renders it primarily useful for the purpose of the surreptitious interception of wire, oral, or electronic communications; or

(ii) any other electronic, mechanical, or other device, where such advertisement promotes the use of such device for the purpose of the surreptitious interception of wire, oral, or electronic communications,

knowing or having reason to know that such advertisement will be sent through the mail or transported in interstate or foreign commerce,

shall be fined not more than $ 10,000 or imprisoned not more than five years, or both.

(2) It shall not be unlawful under this section for--

(a) a provider of wire or electronic communication service or an officer, agent, or employee of, or a person under contract with, such a provider, in the normal course of the business of providing that wire or electronic communication service, or

(b) an officer, agent, or employee of, or a person under contract with, the United States, a State, or a political subdivision thereof, in the normal course of the activities of the United States, a State, or a political subdivision thereof, to send through the mail, send or carry in interstate or foreign commerce, or manufacture, assemble, possess, or sell any electronic, mechanical, or other device knowing or having reason to know that the design of such device renders it primarily useful for the purpose of the surreptitious interception of wire, oral, or electronic communications.

Sec. 2513. Confiscation of wire, oral, or electronic communication intercepting devices

Any electronic, mechanical, or other device used, sent, carried, manufactured, assembled, possessed, sold, or advertised in violation of section 2511 or section 2512 of this chapter may be seized and forfeited to the United States. All provisions of law relating to (1) the seizure, summary and judicial forfeiture, and condemnation of vessels, vehicles, merchandise, and baggage for violations of the customs laws contained in title 19 of the United States Code, (2) the disposition of such vessels, vehicles, merchandise, and baggage or the proceeds from the sale thereof, (3) the remission or mitigation of such forfeiture, (4) the compromise of claims, and (5) the award of compensation to informers in respect of such forfeitures, shall apply to seizures and forfeitures incurred, or alleged to have been incurred, under the provisions of this section, insofar as applicable and not inconsistent with the provisions of this section; except that such duties as are imposed upon the collector of customs or any other person with respect to the seizure and forfeiture of vessels, vehicles, merchandise, and baggage under the provisions of the customs laws contained in title 19 of the United States Code shall be performed with respect to seizure and forfeiture of electronic, mechanical, or other intercepting devices under this section by such officers, agents, or other persons as may be authorized or designated for that purpose by the Attorney General.

Sec. 2515. Prohibition of use as evidence of intercepted wire or oral communications

Whenever any wire or oral communication has been intercepted, no part of the contents of such communication and no evidence derived therefrom may be received in evidence in any trial, hearing, or other proceeding in or before any court, grand jury, department, officer, agency, regulatory body, legislative committee, or other authority of the United States, a State, or a political subdivision thereof if the disclosure of that information would be in violation of this chapter.

Sec. 2516. Authorization for interception of wire, oral, or electronic communications

(1) The Attorney General, Deputy Attorney General, Associate Attorney General, or any Assistant Attorney General, any acting Assistant Attorney General, or any Deputy Assistant Attorney General in the Criminal Division specially designated by the Attorney General, may authorize an application to a Federal judge of competent jurisdiction for, and such judge may grant in conformity with section 2518 of this chapter an order authorizing or approving the interception of wire or oral communications by the Federal Bureau of Investigation, or a Federal agency having responsibility for the investigation of the offense as to which the application is made, when such interception may provide or has provided evidence of--

(a) any offense punishable by death or by imprisonment for more than one year under sections 2274 through 2277 of title 42 of the United States Code (relating to the enforcement of the Atomic Energy Act of 1954), section 2284 of title 42 of the United States Code (relating to sabotage of nuclear facilities or fuel), or under the following chapters of this title: chapter 37 (relating to espionage), chapter 105 (relating to sabotage), chapter 115 (relating to treason), chapter 102 (relating to riots), chapter 65 (relating to malicious mischief), chapter 111 (relating to destruction of vessels), or chapter 81 (relating to piracy);

(b) a violation of section 186 or section 501(c) of title 29, United States Code (dealing with restrictions on payments and loans to labor organizations), or any offense which involves murder, kidnapping, robbery, or extortion, and which is punishable under this title;

(c) any offense which is punishable under the following sections of this title: section 201 (bribery of public officials and witnesses), section 215 (relating to bribery of bank officials), section 224 (bribery in sporting contests), subsection (d), (e), (f), (g), (h), or (i) of section 844 (unlawful use of explosives), section 1032 (relating to concealment of assets), section 1084 (transmission of wagering information), section 751 (relating to escape), section 1014 (relating to loans and credit applications generally; renewals and discounts), sections 1503, 1512, and 1513 (influencing or injuring an officer, juror, or witness generally), section 1510 (obstruction of criminal investigations), section 1511 (obstruction of State or local law enforcement), section 1751 (Presidential and Presidential staff assassination, kidnaping, and assault), section 1951 (interference with commerce by threats or violence), section 1952 (interstate and foreign travel or transportation in aid of racketeering enterprises), section 1958 (relating to use of interstate commerce facilities in the commission of murder for hire), section 1959 (relating to violent crimes in aid of racketeering activity), section 1954 (offer, acceptance, or solicitation to influence operations of employee benefit plan), section 1955 (prohibition of business enterprises of gambling), section 1956 (laundering of monetary instruments), section 1957 (relating to engaging in monetary transactions in property derived from specified unlawful activity), section 659 (theft from interstate shipment), section 664 (embezzlement from pension and

welfare funds), section 1343 (fraud by wire, radio, or television), section 1344 (relating to bank fraud), sections 2251 and 2252 (sexual exploitation of children), sections 2312, 2313, 2314, and 2315 (interstate transportation of stolen property), section 2321 (relating to trafficking in certain motor vehicles or motor vehicle parts), section 1203 (relating to hostage taking), section 1029 (relating to fraud and related activity in connection with access devices), section 3146 (relating to penalty for failure to appear), section 3521(b)(3) (relating to witness relocation and assistance), section 32 (relating to destruction of aircraft or aircraft facilities), section 1963 (violations with respect to racketeer influenced and corrupt organizations), section 115 (relating to threatening or retaliating against a Federal official), and section 1341 (relating to mail fraud), or section 351 (violations with respect to congressional, Cabinet, or Supreme Court assassinations, kidnaping, and assault), section 831 (relating to prohibited transactions involving nuclear materials), section 33 (relating to destruction of motor vehicles or motor vehicle facilities), section 175 (relating to biological weapons), or section 1992 (relating to wrecking trains);

(d) any offense involving counterfeiting punishable under section 471, 472, or 473 of this title;

(e) any offense involving fraud connected with a case under title 11 or the manufacture, importation, receiving, concealment, buying, selling, or otherwise dealing in narcotic drugs, marihuana, or other dangerous drugs, punishable under any law of the United States;

(f) any offense including extortionate credit transactions under sections 892, 893, or 894 of this title;

(g) a violation of section 5322 of title 31, United States Code (dealing with the reporting of currency transactions);

(h) any felony violation of sections 2511 and 2512 (relating to interception and disclosure of certain communications and to certain intercepting devices) of this title;

(i) any felony violation of chapter 71 (relating to obscenity) of this title;

(j) any violation of section 11(c)(2) of the Natural Gas Pipeline Safety Act of 1968 (relating to destruction of a natural gas pipeline) or subsection (i) or (n) of section 902 of the Federal Aviation Act of 1958 (relating to aircraft piracy);

(k) any criminal violation of section 2778 of title 22 (relating to the Arms Export Control Act);

(l) the location of any fugitive from justice from an offense described in this section;

(m) any felony violation of sections 922 and 924 of title 18, United States Code (relating to firearms);

(n) any violation of section 5861 of the Internal Revenue Code of 1986 (relating to firearms); and

(o) any conspiracy to commit any offense described in any subparagraph of this paragraph.

(2) The principal prosecuting attorney of any State, or the principal prosecuting attorney of any political subdivision thereof, if such attorney is authorized by a statute of that State to make application to a State court judge of competent jurisdiction for an order authorizing or approving the interception of wire or oral communications, may apply to such judge for, and such judge may grant in conformity with section 2518 of this chapter and with the applicable State statute an order authorizing, or approving the interception of wire or oral communications by investigative or law enforcement officers having responsibility for the investigation of the offense as to which the application is made, when such interception may provide or has provided evidence of the commission of the offense of murder, kidnapping, gambling, robbery, bribery, extortion, or dealing in narcotic drugs, marihuana or other dangerous drugs, or other crime dangerous to life, limb, or property, and punishable by imprisonment for more than one year, designated in any applicable State statute authorizing such interception, or any conspiracy to commit any of the foregoing offenses.

(3) Any attorney for the Government (as such term is defined for the purposes of the Federal Rules of Criminal Procedure) may authorize an application to a Federal judge of competent jurisdiction for, and such judge may grant, in conformity with section 2518 of this title, an order authorizing or approving the interception of electronic communications by an investigative or law enforcement officer having responsibility for the investigation of the offense as to which the application is made, when such interception may provide or has provided evidence of any Federal felony.

Sec. 2517. Authorization for disclosure and use of intercepted wire, oral, or electronic communications

(1) Any investigative or law enforcement officer who, by any means authorized by this chapter, has obtained knowledge of the contents of any wire, oral, or electronic communication, or evidence derived therefrom, may disclose such contents to another investigative or law enforcement officer to the extent that such disclosure is appropriate to the proper performance of the official duties of the officer making or receiving the disclosure.

(2) Any investigative or law enforcement officer who, by any means authorized by this chapter, has obtained knowledge of the contents of any wire, oral, or electronic communication or evidence derived therefrom may use such contents to the extent such use is appropriate to the proper performance of his official duties.

(3) Any person who has received, by any means authorized by this chapter, any information concerning a wire, oral, or electronic

communication, or evidence derived therefrom intercepted in accordance with the provisions of this chapter may disclose the contents of that communication or such derivative evidence while giving testimony under oath or affirmation in any proceeding held under the authority of the United States or of any State or political subdivision thereof.

(4) No otherwise privileged wire, oral, or electronic communication intercepted in accordance with, or in violation of, the provisions of this chapter shall lose its privileged character.

(5) When an investigative or law enforcement officer, while engaged in intercepting wire, oral, or electronic communications in the manner authorized herein, intercepts wire, oral, or electronic communications relating to offenses other than those specified in the order of authorization or approval, the contents thereof, and evidence derived therefrom, may be disclosed or used as provided in subsections (1) and (2) of this section. Such contents and any evidence derived therefrom may be used under subsection (3) of this section when authorized or approved by a judge of competent jurisdiction where such judge finds on subsequent application that the contents were otherwise intercepted in accordance with the provisions of this chapter. Such application shall be made as soon as practicable.

Sec. 2518. Procedure for interception of wire, oral, or electronic communications

(1) Each application for an order authorizing or approving the interception of a wire, oral, or electronic communication under this chapter shall be made in writing upon oath or affirmation to a judge of competent jurisdiction and shall state the applicant's authority to make such application. Each application shall include the following information:

(a) the identity of the investigative or law enforcement officer making the application, and the officer authorizing the application;

(b) a full and complete statement of the facts and circumstances relied upon by the applicant, to justify his belief that an order should be issued, including (i) details as to the particular offense that has been, is being, or is about to be committed, (ii) except as provided in subsection (11), a particular description of the nature and location of the facilities from which or the place where the communication is to be intercepted, (iii) a particular description of the type of communications sought to be intercepted, (iv) the identity of the person, if known, committing the offense and whose communications are to be intercepted;

(c) a full and complete statement as to whether or not other investigative procedures have been tried and failed or why they reasonably appear to be unlikely to succeed if tried or to be too dangerous;

(d) a statement of the period of time for which the interception is required to be maintained. If the nature of the investigation is such that the authorization for interception should not automatically terminate when

the described type of communication has been first obtained, a particular description of facts establishing probable cause to believe that additional communications of the same type will occur thereafter;

(e) a full and complete statement of the facts concerning all previous applications known to the individual authorizing and making the application, made to any judge for authorization to intercept, or for approval of interceptions of, wire, oral, or electronic communications involving any of the same persons, facilities or places specified in the application, and the action taken by the judge on each such application; and

(f) where the application is for the extension of an order, a statement setting forth the results thus far obtained from the interception, or a reasonable explanation of the failure to obtain such results.

(2) The judge may require the applicant to furnish additional testimony or documentary evidence in support of the application.

(3) Upon such application the judge may enter an ex parte order, as requested or as modified, authorizing or approving interception of wire, oral, or electronic communications within the territorial jurisdiction of the court in which the judge is sitting (and outside that jurisdiction but within the United States in the case of a mobile interception device authorized by a Federal court within such jurisdiction), if the judge determines on the basis of the facts submitted by the applicant that--

(a) there is probable cause for belief that an individual is committing, has committed, or is about to commit a particular offense enumerated in section 2516 of this chapter;

(b) there is probable cause for belief that particular communications concerning that offense will be obtained through such interception;

(c) normal investigative procedures have been tried and have failed or reasonably appear to be unlikely to succeed if tried or to be too dangerous;

(d) except as provided in subsection (11), there is probable cause for belief that the facilities from which, or the place where, the wire, oral, or electronic communications are to be intercepted are being used, or are about to be used, in connection with the commission of such offense, or are leased to, listed in the name of, or commonly used by such person.

(4) Each order authorizing or approving the interception of any wire, oral, or electronic communication under this chapter shall specify--

(a) the identity of the person, if known, whose communications are to be intercepted;

(b) the nature and location of the communications facilities as to which, or the place where, authority to intercept is granted;

(c) a particular description of the type of communication sought to be intercepted, and a statement of the particular offense to which it relates;

(d) the identity of the agency authorized to intercept the communications, and of the person authorizing the application; and

(e) the period of time during which such interception is authorized, including a statement as to whether or not the interception shall automatically terminate when the described communication has been first obtained.

An order authorizing the interception of a wire, oral, or electronic communication under this chapter shall, upon request of the applicant, direct that a provider of wire or electronic communication service, landlord, custodian or other person shall furnish the applicant forthwith all information, facilities, and technical assistance necessary to accomplish the interception unobtrusively and with a minimum of interference with the services that such service provider, landlord, custodian, or person is according the person whose communications are to be intercepted. Any provider of wire or electronic communication service, landlord, custodian or other person furnishing such facilities or technical assistance shall be compensated therefor by the applicant for reasonable expenses incurred in providing such facilities or assistance.

(5) No order entered under this section may authorize or approve the interception of any wire, oral, or electronic communication for any period longer than is necessary to achieve the objective of the authorization, nor in any event longer than thirty days. Such thirty-day period begins on the earlier of the day on which the investigative or law enforcement officer first begins to conduct an interception under the order or ten days after the order is entered. Extensions of an order may be granted, but only upon application for an extension made in accordance with subsection (1) of this section and the court making the findings required by subsection (3) of this section. The period of extension shall be no longer than the authorizing judge deems necessary to achieve the purposes for which it was granted and in no event for longer than thirty days. Every order and extension thereof shall contain a provision that the authorization to intercept shall be executed as soon as practicable, shall be conducted in such a way as to minimize the interception of communications not otherwise subject to interception under this chapter, and must terminate upon attainment of the authorized objective, or in any event in thirty days. In the event the intercepted communication is in a code or foreign language, and an expert in that foreign language or code is not reasonably available during the interception period, minimization may be accomplished as soon as practicable after such interception. An interception under this chapter may be conducted in whole or in part by Government personnel, or by an individual operating under a contract with the Government, acting under the supervision of an investigative or law enforcement officer authorized to conduct the interception.

(6) Whenever an order authorizing interception is entered pursuant to this chapter, the order may require reports to be made to the judge who

issued the order showing what progress has been made toward achievement of the authorized objective and the need for continued interception. Such reports shall be made at such intervals as the judge may require.

(7) Notwithstanding any other provision of this chapter, any investigative or law enforcement officer, specially designated by the Attorney General, the Deputy Attorney General, the Associate Attorney General, or by the principal prosecuting attorney of any State or subdivision thereof acting pursuant to a statute of that State, who reasonably determines that--

(a) an emergency situation exists that involves--

(i) immediate danger of death or serious physical injury to any person,

(ii) conspiratorial activities threatening the national security interest, or

(iii) conspiratorial activities characteristic of organized crime,

that requires a wire, oral, or electronic communication to be intercepted before an order authorizing such interception can, with due diligence, be obtained, and

(b) there are grounds upon which an order could be entered under this chapter to authorize such interception,

may intercept such wire, oral, or electronic communication if an application for an order approving the interception is made in accordance with this section within forty-eight hours after the interception has occurred, or begins to occur. In the absence of an order, such interception shall immediately terminate when the communication sought is obtained or when the application for the order is denied, whichever is earlier. In the event such application for approval is denied, or in any other case where the interception is terminated without an order having been issued, the contents of any wire, oral, or electronic communication intercepted shall be treated as having been obtained in violation of this chapter, and an inventory shall be served as provided for in subsection (d) of this section on the person named in the application.

(8)(a) The contents of any wire, oral, or electronic communication intercepted by any means authorized by this chapter shall, if possible, be recorded on tape or wire or other comparable device. The recording of the contents of any wire, oral, or electronic communication under this subsection shall be done in such way as will protect the recording from editing or other alterations. Immediately upon the expiration of the period of the order, or extensions thereof, such recordings shall be made available to the judge issuing such order and sealed under his directions. Custody of the recordings shall be wherever the judge orders. They shall not be destroyed except upon an order of the issuing or denying judge and in any event shall be kept for ten years. Duplicate recordings may be made for use or disclosure pursuant to the provisions of subsections (1) and (2) of section 2517 of this chapter for investigations. The presence of

the seal provided for by this subsection, or a satisfactory explanation for the absence thereof, shall be a prerequisite for the use or disclosure of the contents of any wire, oral, or electronic communication or evidence derived therefrom under subsection (3) of section 2517.

(b) Applications made and orders granted under this chapter shall be sealed by the judge. Custody of the applications and orders shall be wherever the judge directs. Such applications and orders shall be disclosed only upon a showing of good cause before a judge of competent jurisdiction and shall not be destroyed except on order of the issuing or denying judge, and in any event shall be kept for ten years.

(c) Any violation of the provisions of this subsection may be punished as contempt of the issuing or denying judge.

(d) Within a reasonable time but not later than ninety days after the filing of an application for an order of approval under section 2518(7)(b) which is denied or the termination of the period of an order or extensions thereof, the issuing or denying judge shall cause to be served, on the persons named in the order or the application, and such other parties to intercepted communications as the judge may determine in his discretion that is in the interest of justice, an inventory which shall include notice of--

(1) the fact of the entry of the order or the application;

(2) the date of the entry and the period of authorized, approved or disapproved interception, or the denial of the application; and

(3) the fact that during the period wire, oral, or electronic communications were or were not intercepted.

The judge, upon the filing of a motion, may in his discretion make available to such person or his counsel for inspection such portions of the intercepted communications, applications and orders as the judge determines to be in the interest of justice. On an ex parte showing of good cause to a judge of competent jurisdiction the serving of the inventory required by this subsection may be postponed.

(9) The contents of any wire, oral, or electronic communication intercepted pursuant to this chapter or evidence derived therefrom shall not be received in evidence or otherwise disclosed in any trial, hearing, or other proceeding in a Federal or State court unless each party, not less than ten days before the trial, hearing, or proceeding, has been furnished with a copy of the court order, and accompanying application, under which the interception was authorized or approved. This ten-day period may be waived by the judge if he finds that it was not possible to furnish the party with the above information ten days before the trial, hearing, or proceeding and that the party will not be prejudiced by the delay in receiving such information.

(10)(a) Any aggrieved person in any trial, hearing, or proceeding in or before any court, department, officer, agency, regulatory body, or other

authority of the United States, a State, or a political subdivision thereof, may move to suppress the contents of any wire or oral communication intercepted pursuant to this chapter, or evidence derived therefrom, on the grounds that--

(i) the communication was unlawfully intercepted;

(ii) the order of authorization or approval under which it was intercepted is insufficient on its face; or

(iii) the interception was not made in conformity with the order of authorization or approval.

Such motion shall be made before the trial, hearing, or proceeding unless there was no opportunity to make such motion or the person was not aware of the grounds of the motion. If the motion is granted, the contents of the intercepted wire or oral communication, or evidence derived therefrom, shall be treated as having been obtained in violation of this chapter. The judge, upon the filing of such motion by the aggrieved person, may in his discretion make available to the aggrieved person or his counsel for inspection such portions of the intercepted communication or evidence derived therefrom as the judge determines to be in the interests of justice.

(b) In addition to any other right to appeal, the United States shall have the right to appeal from an order granting a motion to suppress made under paragraph (a) of this subsection, or the denial of an application for an order of approval, if the United States attorney shall certify to the judge or other official granting such motion or denying such application that the appeal is not taken for purposes of delay. Such appeal shall be taken within thirty days after the date the order was entered and shall be diligently prosecuted.

(c) The remedies and sanctions described in this chapter with respect to the interception of electronic communications are the only judicial remedies and sanctions for nonconstitutional violations of this chapter involving such communications.

(11) The requirements of subsections (1)(b)(ii) and (3)(d) of this section relating to the specification of the facilities from which, or the place where, the communication is to be intercepted do not apply if--

(a) in the case of an application with respect to the interception of an oral communication--

(i) the application is by a Federal investigative or law enforcement officer and is approved by the Attorney General, the Deputy Attorney General, the Associate Attorney General, an Assistant Attorney General, or an acting Assistant Attorney General;

(ii) the application contains a full and complete statement as to why such specification is not practical and identifies the person committing the offense and whose communications are to be intercepted; and

(iii) the judge finds that such specification is not practical; and

(b) in the case of an application with respect to a wire or electronic communication--

(i) the application is by a Federal investigative or law enforcement officer and is approved by the Attorney General, the Deputy Attorney General, the Associate Attorney General, an Assistant Attorney General, or an acting Assistant Attorney General;

(ii) the application identifies the person believed to be committing the offense and whose communications are to be intercepted and the applicant makes a showing of a purpose, on the part of that person, to thwart interception by changing facilities; and

(iii) the judge finds that such purpose has been adequately shown.

(12) An interception of a communication under an order with respect to which the requirements of subsections (1)(b)(ii) and (3)(d) of this section do not apply by reason of subsection (11) shall not begin until the facilities from which, or the place where, the communication is to be intercepted is ascertained by the person implementing the interception order. A provider of wire or electronic communications service that has received an order as provided for in subsection (11)(b) may move the court to modify or quash the order on the ground that its assistance with respect to the interception cannot be performed in a timely or reasonable fashion. The court, upon notice to the government, shall decide such a motion expeditiously.

Sec. 2519. Reports concerning intercepted wire, oral, or electronic communications

(1) Within thirty days after the expiration of an order (or each extension thereof) entered under section 2518, or the denial of an order approving an interception, the issuing or denying judge shall report to the Administrative Office of the United States Courts--

(a) the fact that an order or extension was applied for;

(b) the kind of order or extension applied for (including whether or not the order was an order with respect to which the requirements of sections 2518(1)(b)(ii) and 2518(3)(d) of this title did not apply by reason of section 2518(11) of this title);

(c) the fact that the order or extension was granted as applied for, was modified, or was denied;

(d) the period of interceptions authorized by the order, and the number and duration of any extensions of the order;

(e) the offense specified in the order or application, or extension of an order;

(f) the identity of the applying investigative or law enforcement officer and agency making the application and the person authorizing the

application; and

(g) the nature of the facilities from which or the place where communications were to be intercepted.

(2) In January of each year the Attorney General, an Assistant Attorney General specially designated by the Attorney General, or the principal prosecuting attorney of a State, or the principal prosecuting attorney for any political subdivision of a State, shall report to the Administrative Office of the United States Courts--

(a) the information required by paragraphs (a) through (g) of subsection (1) of this section with respect to each application for an order or extension made during the preceding calendar year;

(b) a general description of the interceptions made under such order or extension, including (i) the approximate nature and frequency of incriminating communications intercepted, (ii) the approximate nature and frequency of other communications intercepted, (iii) the approximate number of persons whose communications were intercepted, and (iv) the approximate nature, amount, and cost of the manpower and other resources used in the interceptions;

(c) the number of arrests resulting from interceptions made under such order or extension, and the offenses for which arrests were made;

(d) the number of trials resulting from such interceptions;

(e) the number of motions to suppress made with respect to such interceptions, and the number granted or denied;

(f) the number of convictions resulting from such interceptions and the offenses for which the convictions were obtained and a general assessment of the importance of the interceptions; and

(g) the information required by paragraphs (b) through (f) of this subsection with respect to orders or extensions obtained in a preceding calendar year.

(3) In April of each year the Director of the Administrative Office of the United States Courts shall transmit to the Congress a full and complete report concerning the number of applications for orders authorizing or approving the interception of wire, oral, or electronic communications pursuant to this chapter and the number of orders and extensions granted or denied pursuant to this chapter during the preceding calendar year. Such report shall include a summary and analysis of the data required to be filed with the Administrative Office by subsections (1) and (2) of this section. The Director of the Administrative Office of the United States Courts is authorized to issue binding regulations dealing with the content and form of the reports required to be filed by subsections (1) and (2) of this section.

Sec. 2520. Recovery of civil damages authorized

(a) In general. Except as provided in section 2511(2)(a)(ii), any person whose wire, oral, or electronic communication is intercepted, disclosed, or intentionally used in violation of this chapter may in a civil action recover from the person or entity which engaged in that violation such relief as may be appropriate.

(b) Relief. In an action under this section, appropriate relief includes--

(1) such preliminary and other equitable or declaratory relief as may be appropriate;

(2) damages under subsection (c) and punitive damages in appropriate cases; and

(3) a reasonable attorney's fee and other litigation costs reasonably incurred.

(c) Computation of damages.

(1) In an action under this section, if the conduct in violation of this chapter, is the private viewing of a private satellite video communication that is not scrambled or encrypted or if the communication is a radio communication that is transmitted on frequencies allocated under subpart D of part 74 of the rules of the Federal Communications Commission that is not scrambled or encrypted and the conduct is not for a tortious or illegal purpose or for purposes of direct or indirect commercial advantage or private commercial gain, then the court shall assess damages as follows:

(A) If the person who engaged in that conduct has not previously been enjoined under section 2511(5) and has not been found liable in a prior civil action under this section, the court shall assess the greater of the sum of actual damages suffered by the plaintiff, or statutory damages of not less than $ 50 and not more than $ 500.

(B) If, on one prior occasion, the person who engaged in that conduct has been enjoined under section 2511(5) or has been found liable in a civil action under this section, the court shall assess the greater of the sum of actual damages suffered by the plaintiff, or statutory damages of not less than $ 100 and not more than $ 1000.

(2) In any other action under this section, the court may assess as damages whichever is the greater of--

(A) the sum of the actual damages suffered by the plaintiff and any profits made by the violator as a result of the violation; or

(B) statutory damages of whichever is the greater of $ 100 a day for each day of violation or $ 10,000.

(d) Defense. A good faith reliance on--

(1) a court warrant or order, a grand jury subpoena, a legislative authorization, or a statutory authorization;

(2) a request of an investigative or law enforcement officer under section 2518(7) of this title; or

(3) a good faith determination that section 2511(3) of this title permitted the conduct complained of; is a complete defense against any civil or criminal action brought under this chapter or any other law.

(e) Limitation. A civil action under this section may not be commenced later than two years after the date upon which the claimant first has a reasonable opportunity to discover the violation.

Sec. 2521. Injunction against illegal interception

Whenever it shall appear that any person is engaged or is about to engage in any act which constitutes or will constitute a felony violation of this chapter, the Attorney General may initiate a civil action in a district court of the United States to enjoin such violation. The court shall proceed as soon as practicable to the hearing and determination of such an action, and may, at any time before final determination, enter such a restraining order or prohibition, or take such other action, as is warranted to prevent a continuing and substantial injury to the United States or to any person or class of persons for whose protection the action is brought. A proceeding under this section is governed by the Federal Rules of Civil Procedure, except that, if an indictment has been returned against the respondent, discovery is governed by the Federal Rules of Criminal Procedure.

CHAPTER 121. STORED WIRE AND ELECTRONIC COMMUNICATIONS AND TRANSACTIONAL RECORDS ACCESS

Sec. 2701. Unlawful access to stored communications

(a) Offense. Except as provided in subsection (c) of this section whoever--

(1) intentionally accesses without authorization a facility through which an electronic communication service is provided; or

(2) intentionally exceeds an authorization to access that facility; and thereby obtains, alters, or prevents authorized access to a wire or electronic communication while it is in electronic storage in such system shall be punished as provided in subsection (b) of this section.

(b) Punishment. The punishment for an offense under subsection (a) of this section is--

(1) if the offense is committed for purposes of commercial advantage, malicious destruction or damage, or private commercial gain--

(A) a fine of not more than $ 250,000 or imprisonment for not more than one year, or both, in the case of a first offense under this subparagraph; and

(B) a fine under this title or imprisonment for not more than two years, or both, for any subsequent offense under this subparagraph; and

(2) a fine of not more than $ 5,000 or imprisonment for not more than six months, or both, in any other case.

(c) Exceptions. Subsection (a) of this section does not apply with respect to conduct authorized--

(1) by the person or entity providing a wire or electronic communications service;

(2) by a user of that service with respect to a communication of or intended for that user; or

(3) in section 2703, 2704 or 2518 of this title.

Sec. 2702. Disclosure of contents

(a) Prohibitions. Except as provided in subsection (b)--

(1) a person or entity providing an electronic communication service to the public shall not knowingly divulge to any person or entity the contents of a communication while in electronic storage by that service; and

(2) a person or entity providing remote computing service to the public shall not knowingly divulge to any person or entity the contents of any communication which is carried or maintained on that service--

(A) on behalf of, and received by means of electronic transmission from (or created by means of computer processing of communications received by means of electronic transmission from), a subscriber or customer of such service; and

(B) solely for the purpose of providing storage or computer processing services to such subscriber or customer, if the provider is not authorized to access the contents of any such communications for purposes of providing any services other than storage or computer processing.

(b) Exceptions. A person or entity may divulge the contents of a communication--

(1) to an addressee or intended recipient of such communication or an agent of such addressee or intended recipient;

(2) as otherwise authorized in section 2517, 2511(2)(a), or 2703 of this title;

(3) with the lawful consent of the originator or an addressee or intended recipient of such communication, or the subscriber in the case of remote computing service;

(4) to a person employed or authorized or whose facilities are used to forward such communication to its destination;

(5) as may be necessarily incident to the rendition of the service or to the protection of the rights or property of the provider of that service; or

(6) to a law enforcement agency, if such contents--

(A) were inadvertently obtained by the service provider; and

(B) appear to pertain to the commission of a crime.

Sec. 2704. Backup preservation

(a) Backup preservation.

(1) A governmental entity acting under section 2703(b)(2) may include in its subpoena or court order a requirement that the service provider to whom the request is directed create a backup copy of the contents of the electronic communications sought in order to preserve those communications. Without notifying the subscriber or customer of such subpoena or court order, such service provider shall create such backup copy as soon as practicable consistent with its regular business practices and shall confirm to the governmental entity that such backup copy has been made. Such backup copy shall be created within two business days after receipt by the service provider of the subpoena or court order.

(2) Notice to the subscriber or customer shall be made by the governmental entity within three days after receipt of such confirmation, unless such notice is delayed pursuant to section 2705(a).

(3) The service provider shall not destroy such backup copy until the later of--

(A) the delivery of the information; or

(B) the resolution of any proceedings (including appeals of any proceeding) concerning the government's subpoena or court order.

(4) The service provider shall release such backup copy to the requesting governmental entity no sooner than fourteen days after the governmental entity's notice to the subscriber or customer if such service provider--

(A) has not received notice from the subscriber or customer that the subscriber or customer has challenged the governmental entity's request; and

(B) has not initiated proceedings to challenge the request of the governmental entity.

(5) A governmental entity may seek to require the creation of a backup copy under subsection (a)(1) of this section if in its sole discretion such entity determines that there is reason to believe that notification under section 2703 of this title of the existence of the subpoena or court order may result in destruction of or tampering with evidence. This determination is not subject to challenge by the subscriber or customer or service provider.

(b) Customer challenges.

(1) Within fourteen days after notice by the governmental entity to the subscriber or customer under subsection (a)(2) of this section, such subscriber or customer may file a motion to quash such subpoena or vacate such court order, with copies served upon the governmental entity and with written notice of such challenge to the service provider. A motion to vacate a court order shall be filed in the court which issued such order. A motion to quash a subpoena shall be filed in the appropriate United States district court or State court. Such motion or application shall contain an affidavit or sworn statement--

(A) stating that the applicant is a customer or subscriber to the service from which the contents of electronic communications maintained for him have been sought; and

(B) stating the applicant's reasons for believing that the records sought are not relevant to a legitimate law enforcement inquiry or that there has not been substantial compliance with the provisions of this chapter in some other respect.

(2) Service shall be made under this section upon a governmental entity by delivering or mailing by registered or certified mail a copy of the papers to the person, office, or department specified in the notice which the customer has received pursuant to this chapter. For the purposes of this section, the term "delivery" has the meaning given that term in the Federal Rules of Civil Procedure.

(3) If the court finds that the customer has complied with paragraphs (1) and (2) of this subsection, the court shall order the governmental entity to file a sworn response, which may be filed in camera if the governmental entity includes in its response the reasons which make in camera review appropriate. If the court is unable to determine the motion or application on the basis of the parties' initial allegations and response, the court may conduct such additional proceedings as it deems appropriate. All such proceedings shall be completed and the motion or application decided as soon as practicable after the filing of the governmental entity's response.

(4) If the court finds that the applicant is not the subscriber or customer for whom the communications sought by the governmental entity are maintained, or that there is a reason to believe that the law enforcement inquiry is legitimate and that the communications sought are relevant to that inquiry, it shall deny the motion or application and order such process enforced. If the court finds that the applicant is the subscriber or customer for whom the communications sought by the governmental entity are maintained, and that there is not a reason to believe that the communications sought are relevant to a legitimate law enforcement inquiry, or that there has not been substantial compliance with the provisions of this chapter, it shall order the process quashed.

(5) A court order denying a motion or application under this section shall not be deemed a final order and no interlocutory appeal may be taken therefrom by the customer.

Sec. 2705. Delayed notice

(a) Delay of notification.

(1) A governmental entity acting under section 2703(b) of this title may--

(A) where a court order is sought, include in the application a request, which the court shall grant, for an order delaying the notification required under section 2703(b) of this title for a period not to exceed ninety days, if the court determines that there is reason to believe that notification of the existence of the court order may have an adverse result described in paragraph (2) of this subsection; or

(B) where an administrative subpoena authorized by a Federal or State statute or a Federal or State grand jury subpoena is obtained, delay the notification required under section 2703(b) of this title for a period not to exceed ninety days upon the execution of a written certification of a supervisory official that there is reason to believe that notification of the existence of the subpoena may have an adverse result described in paragraph (2) of this subsection.

(2) An adverse result for the purposes of paragraph (1) of this subsection is--

(A) endangering the life or physical safety of an individual;

(B) flight from prosecution;

(C) destruction of or tampering with evidence;

(D) intimidation of potential witnesses; or

(E) otherwise seriously jeopardizing an investigation or unduly delaying a trial.

(3) The governmental entity shall maintain a true copy of certification under paragraph (1)(B).

(4) Extensions of the delay of notification provided in section 2703 of up to ninety days each may be granted by the court upon application, or by certification by a governmental entity, but only in accordance with subsection (b) of this section.

(5) Upon expiration of the period of delay of notification under paragraph (1) or (4) of this subsection, the governmental entity shall serve upon, or deliver by registered or first-class mail to, the customer or subscriber a copy of the process or request together with notice that--

(A) states with reasonable specificity the nature of the law enforcement inquiry; and

(B) informs such customer or subscriber--

(i) that information maintained for such customer or subscriber by the service provider named in such process or request was supplied to or

requested by that governmental authority and the date on which the supplying or request took place;

(ii) that notification of such customer or subscriber was delayed;

(iii) what governmental entity or court made the certification or determination pursuant to which that delay was made; and

(iv) which provision of this chapter allowed such delay.

(6) As used in this subsection, the term "supervisory official" means the investigative agent in charge or assistant investigative agent in charge or an equivalent of an investigating agency's headquarters or regional office, or the chief prosecuting attorney or the first assistant prosecuting attorney or an equivalent of a prosecuting attorney's headquarters or regional office.

(b) Preclusion of notice to subject of governmental access. A governmental entity acting under section 2703, when it is not required to notify the subscriber or customer under section 2703(b)(1), or to the extent that it may delay such notice pursuant to subsection (a) of this section, may apply to a court for an order commanding a provider of electronic communications service or remote computing service to whom a warrant, subpoena, or court order is directed, for such period as the court deems appropriate, not to notify any other person of the existence of the warrant, subpoena, or court order. The court shall enter such an order if it determines that there is reason to believe that notification of the existence of the warrant, subpoena, or court order will result in--

(1) endangering the life or physical safety of an individual;

(2) flight from prosecution;

(3) destruction of or tampering with evidence;

(4) intimidation of potential witnesses; or

(5) otherwise seriously jeopardizing an investigation or unduly delaying a trial.

Sec. 2706. Cost reimbursement

(a) Payment. Except as otherwise provided in subsection (c), a governmental entity obtaining the contents of communications, records, or other information under section 2702, 2703, or 2704 of this title shall pay to the person or entity assembling or providing such information a fee for reimbursement for such costs as are reasonably necessary and which have been directly incurred in searching for, assembling, reproducing, or otherwise providing such information. Such reimbursable costs shall include any costs due to necessary disruption of normal operations of any electronic communication service or remote computing service in which such information may be stored.

(b) Amount. The amount of the fee provided by subsection (a) shall be as mutually agreed by the governmental entity and the person or entity providing the information, or, in the absence of agreement, shall be as determined by the court which issued the order for production of such information (or the court before which a criminal prosecution relating to such information would be brought, if no court order was issued for production of the information).

(c) Exception. The requirement of subsection (a) of this section does not apply with respect to records or other information maintained by a communications common carrier that relate to telephone toll records and telephone listings obtained under section 2703 of this title. The court may, however, order a payment as described in subsection (a) if the court determines the information required is unusually voluminous in nature or otherwise caused an undue burden on the provider.

Sec. 2707. Civil action

(a) Cause of action. Except as provided in section 2703(e), any provider of electronic communication service, subscriber, or customer aggrieved by any violation of this chapter in which the conduct constituting the violation is engaged in with a knowing or intentional state of mind may, in a civil action, recover from the person or entity which engaged in that violation such relief as may be appropriate.

(b) Relief. In a civil action under this section, appropriate relief includes--

(1) such preliminary and other equitable or declaratory relief as may be appropriate;

(2) damages under subsection (c); and

(3) a reasonable attorney's fee and other litigation costs reasonably incurred.

(c) Damages. The court may assess as damages in a civil action under this section the sum of the actual damages suffered by the plaintiff and any profits made by the violator as a result of the violation, but in no case shall a person entitled to recover receive less than the sum of $ 1,000.

(d) Defense. A good faith reliance on--

(1) a court warrant or order, a grand jury subpoena, a legislative authorization, or a statutory authorization;

(2) a request of an investigative or law enforcement officer under section 2518(7) of this title; or

(3) a good faith determination that section 2511(3) of this title permitted the conduct complained of; is a complete defense to any civil or criminal action brought under this chapter or any other law.

(e) Limitation. A civil action under this section may not be commenced later than two years after the date upon which the claimant first discovered or had a reasonable opportunity to discover the violation.

Sec. 2708. Exclusivity of remedies

The remedies and sanctions described in this chapter are the only judicial remedies and sanctions for nonconstitutional violations of this chapter.

Sec. 2709. Counterintelligence access to telephone toll and transactional records

(a) Duty to provide. A wire or electronic communication service provider shall comply with a request for subscriber information and toll billing records information, or electronic communication transactional records in its custody or possession made by the Director of the Federal Bureau of Investigation under subsection (b) of this section.

(b) Required certification. The Director of the Federal Bureau of Investigation (or an individual within the Federal Bureau of Investigation designated for this purpose by the Director) may request any such information and records if the Director (or the Director's designee) certifies in writing to the wire or electronic communication service provider to which the request is made that--

(1) the information sought is relevant to an authorized foreign counterintelligence investigation; and

(2) there are specific and articulable facts giving reason to believe that the person or entity to whom the information sought pertains is a foreign power or an agent of a foreign power as defined in section 101 of the Foreign Intelligence Surveillance Act of 1978 (50 U.S.C. 1801).

(c) Prohibition of certain disclosure. No wire or electronic communication service provider, or officer, employee, or agent thereof, shall disclose to any person that the Federal Bureau of Investigation has sought or obtained access to information or records under this section.

(d) Dissemination by bureau. The Federal Bureau of Investigation may disseminate information and records obtained under this section only as provided in guidelines approved by the Attorney General for foreign intelligence collection and foreign counterintelligence investigations conducted by the Federal Bureau of Investigation, and, with respect to dissemination to an agency of the United States, only if such information is clearly relevant to the authorized responsibilities of such agency.

(e) Requirement that certain Congressional bodies be informed. On a semiannual basis the Director of the Federal Bureau of Investigation shall fully inform the Permanent Select Committee on Intelligence of the House of Representatives and the Select Committee on Intelligence of the Senate concerning all requests made under subsection (b) of this section.

Sec. 2710. Wrongful disclosure of video tape rental or sale records

(a) Definitions. For purposes of this section--

(1) the term "consumer" means any renter, purchaser, or subscriber of goods or services from a video tape service provider;

(2) the term "ordinary course of business" means only debt collection activities, order fulfillment, request processing, and the transfer of ownership;

(3) the term "personally identifiable information" includes information which identifies a person as having requested or obtained specific video materials or services from a video tape service provider; and

(4) the term "video tape service provider" means any person, engaged in the business, in or affecting interstate or foreign commerce, of rental, sale, or delivery of prerecorded video cassette tapes or similar audio visual materials, or any person or other entity to whom a disclosure is made under subparagraph (D) or (E) of subsection (b)(2), but only with respect to the information contained in the disclosure.

(b) Video tape rental and sale records.

(1) A video tape service provider who knowingly discloses, to any person, personally identifiable information concerning any consumer of such provider shall be liable to the aggrieved person for the relief provided in subsection (d).

(2) A video tape service provider may disclose personally identifiable information concerning any consumer--

(A) to the consumer;

(B) to any person with the informed, written consent of the consumer given at the time the disclosure is sought;

(C) to a law enforcement agency pursuant to a warrant issued under the Federal Rules of Criminal Procedure, an equivalent State warrant, a grand jury subpoena, or a court order;

(D) to any person if the disclosure is solely of the names and addresses of consumers and if--

(i) the video tape service provider has provided the consumer with the opportunity, in a clear and conspicuous manner, to prohibit such disclosure; and

(ii) the disclosure does not identify the title, description, or subject matter of any video tapes or other audio visual material; however, the subject matter of such materials may be disclosed if the disclosure is for the exclusive use of marketing goods and services directly to the consumer;

(E) to any person if the disclosure is incident to the ordinary course of business of the video tape service provider; or

(F) pursuant to a court order, in a civil proceeding upon a showing of compelling need for the information that cannot be accommodated by any other means, if--

(i) the consumer is given reasonable notice, by the person seeking the disclosure, of the court proceeding relevant to the issuance of the court order; and

(ii) the consumer is afforded the opportunity to appear and contest the claim of the person seeking the disclosure.

If an order is granted pursuant to subparagraph (C) or (F), the court shall impose appropriate safeguards against unauthorized disclosure.

(3) Court orders authorizing disclosure under subparagraph (C) shall issue only with prior notice to the consumer and only if the law enforcement agency shows that there is probable cause to believe that the records or other information sought are relevant to a legitimate law enforcement inquiry. In the case of a State government authority, such a court order shall not issue if prohibited by the law of such State. A court issuing an order pursuant to this section, on a motion made promptly by the video tape service provider, may quash or modify such order if the information or records requested are unreasonably voluminous in nature or if compliance with such order otherwise would cause an unreasonable burden on such provider.

(c) Civil action.

(1) Any person aggrieved by any act of a person in violation of this section may bring a civil action in a United States district court.

(2) The court may award--

(A) actual damages but not less than liquidated damages in an amount of $ 2,500;

(B) punitive damages;

(C) reasonable attorneys' fees and other litigation costs reasonably incurred; and

(D) such other preliminary and equitable relief as the court determines to be appropriate.

(3) No action may be brought under this subsection unless such action is begun within 2 years from the date of the act complained of or the date of discovery.

(4) No liability shall result from lawful disclosure permitted by this section.

(d) Personally identifiable information. Personally identifiable information obtained in any manner other than as provided in this section shall not be received in evidence in any trial, hearing, arbitration, or other proceeding in or before any court, grand jury, department, officer, agency, regulatory body, legislative committee, or other authority of the

United States, a State, or a political subdivision of a State.

(e) Destruction of old records. A person subject to this section shall destroy personally identifiable information as soon as practicable, but no later than one year from the date the information is no longer necessary for the purpose for which it was collected and there are no pending requests or orders for access to such information under subsection (b)(2) or (c)(2) or pursuant to a court order.

(f) Preemption. The provisions of this section preempt only the provisions of State or local law that require disclosure prohibited by this section.

Sec. 2711. Definitions for chapter

As used in this chapter--

(1) the terms defined in section 2510 of this title have, respectively, the definitions given such terms in that section; and

(2) the term "remote computing service" means the provision to the public of computer storage or processing services by means of an electronic communications system.

TITLE 18. CRIMES AND CRIMINAL PROCEDURE

PART II. CRIMINAL PROCEDURE

CHAPTER 206. PEN REGISTERS AND TRAP AND TRACE DEVICES

Sec. 3121. General prohibition on pen register and trap and trace device use; exception

(a) In general. Except as provided in this section, no person may install or use a pen register or a trap and trace device without first obtaining a court order under section 3123 of this title or under the Foreign Intelligence Surveillance Act of 1978 (50 U.S.C. 1801 et seq.).

(b) Exception. The prohibition of subsection (a) does not apply with respect to the use of a pen register or a trap and trace device by a provider of electronic or wire communication service--

(1) relating to the operation, maintenance, and testing of a wire or electronic communication service or to the protection of the rights or property of such provider, or to the protection of users of that service from abuse of service or unlawful use of service; or

(2) to record the fact that a wire or electronic communication was initiated or completed in order to protect such provider, another provider furnishing service toward the completion of the wire communication, or a user of that service, from fraudulent, unlawful or abusive use of service; or

(3) where the consent of the user of that service has been obtained.

(c) Penalty. Whoever knowingly violates subsection (a) shall be fined under this title or imprisoned not more than one year, or both.

Sec. 3122. Application for an order for a pen register or a trap and trace device

(a) Application.

(1) An attorney for the Government may make application for an order or an extension of an order under section 3123 of this title authorizing or approving the installation and use of a pen register or a trap and trace device under this chapter, in writing under oath or equivalent affirmation, to a court of competent jurisdiction.

(2) Unless prohibited by State law, a State investigative or law enforcement officer may make application for an order or an extension of an order under section 3123 of this title authorizing or approving the installation and use of a pen register or a trap and trace device under this chapter, in writing under oath or equivalent affirmation, to a court of competent jurisdiction of such State.

(b) Contents of application. An application under subsection (a) of this section shall include--

(1) the identity of the attorney for the Government or the State law enforcement or investigative officer making the application and the identity of the law enforcement agency conducting the investigation; and

(2) a certification by the applicant that the information likely to be obtained is relevant to an ongoing criminal investigation being conducted by that agency.

Sec. 3123. Issuance of an order for a pen register or a trap and trace device

(a) In general. Upon an application made under section 3122 of this title, the court shall enter an ex parte order authorizing the installation and use of a pen register or a trap and trace device within the jurisdiction of the court if the court finds that the attorney for the Government or the State law enforcement or investigative officer has certified to the court that the information likely to be obtained by such installation and use is relevant to an ongoing criminal investigation.

(b) Contents of order. An order issued under this section--

(1) shall specify--

(A) the identity, if known, of the person to whom is leased or in whose name is listed the telephone line to which the pen register or trap and trace device is to be attached;

(B) the identity, if known, of the person who is the subject of the criminal investigation;

(C) the number and, if known, physical location of the telephone line to which the pen register or trap and trace device is to be attached and,

in the case of a trap and trace device, the geographic limits of the trap and trace order; and

(D) a statement of the offense to which the information likely to be obtained by the pen register or trap and trace device relates; and

(2) shall direct, upon the request of the applicant, the furnishing of information, facilities, and technical assistance necessary to accomplish the installation of the pen register or trap and trace device under section 3124 of this title.

(c) Time period and extensions.

(1) An order issued under this section shall authorize the installation and use of a pen register or a trap and trace device for a period not to exceed sixty days.

(2) Extensions of such an order may be granted, but only upon an application for an order under section 3122 of this title and upon the judicial finding required by subsection (a) of this section. The period of extension shall be for a period not to exceed sixty days.

(d) Nondisclosure of existence of pen register or a trap and trace device. An order authorizing or approving the installation and use of a pen register or a trap and trace device shall direct that--

(1) the order be sealed until otherwise ordered by the court; and

(2) the person owning or leasing the line to which the pen register or a trap and trace device is attached, or who has been ordered by the court to provide assistance to the applicant, not disclose the existence of the pen register or trap and trace device or the existence of the investigation to the listed subscriber, or to any other person, unless or until otherwise ordered by the court.

Sec. 3124. Assistance in installation and use of a pen register or a trap and trace device

(a) Pen registers. Upon the request of an attorney for the government or an officer of a law enforcement agency authorized to install and use a pen register under this chapter, a provider of wire or electronic communication service, landlord, custodian, or other person shall furnish such investigative or law enforcement officer forthwith all information, facilities, and technical assistance necessary to accomplish the installation of the pen register unobtrusively and with a minimum of interference with the services that the person so ordered by the court accords the party with respect to whom the installation and use is to take place, if such assistance is directed by a court order as provided in section 3123(b)(2) of this title.

(b) Trap and trace device. Upon the request of an attorney for the Government or an officer of a law enforcement agency authorized to receive the results of a trap and trace device under this chapter, a provider of a wire or electronic communication service, landlord, custodian, or other

person shall install such device forthwith on the appropriate line and shall furnish such investigative or law enforcement officer all additional information, facilities and technical assistance including installation and operation of the device unobtrusively and with a minimum of interference with the services that the person so ordered by the court accords the party with respect to whom the installation and use is to take place, if such installation and assistance is directed by a court order as provided in section 3123(b)(2) of this title. Unless otherwise ordered by the court, the results of the trap and trace device shall be furnished, pursuant to section 3123(b) or section 3125 of this title, to the officer of a law enforcement agency, designated in the court order, at reasonable intervals during regular business hours for the duration of the order.

(c) Compensation. A provider of a wire or electronic communication service, landlord, custodian, or other person who furnishes facilities or technical assistance pursuant to this section shall be reasonably compensated for such reasonable expenses incurred in providing such facilities and assistance.

(d) No cause of action against a provider disclosing information under this chapter. No cause of action shall lie in any court against any provider of a wire or electronic communication service, its officers, employees, agents, or other specified persons for providing information, facilities, or assistance in accordance with the terms of a court order under this chapter or request pursuant to section 3125 of this title.

(e) Defense. A good faith reliance on a court order under this chapter, a request pursuant to section 3125 of this title, a legislative authorization, or a statutory authorization is a complete defense against any civil or criminal action brought under this chapter or any other law.

Sec. 3125. Emergency pen register and trap and trace device installation

(a) Notwithstanding any other provision of this chapter, any investigative or law enforcement officer, specially designated by the Attorney General, the Deputy Attorney General, the Associate Attorney General, any Assistant Attorney General, any acting Assistant Attorney General, or any Deputy Assistant Attorney General, or by the principal prosecuting attorney of any State or subdivision thereof acting pursuant to a statute of that State, who reasonably determines that--

(1) an emergency situation exists that involves--

(A) immediate danger of death or serious bodily injury to any person; or

(B) conspiratorial activities characteristic of organized crime,

that requires the installation and use of a pen register or a trap and trace device before an order authorizing such installation and use can, with due diligence, be obtained, and

(2) there are grounds upon which an order could be entered under this chapter to authorize such installation and use "may have installed and use a pen register or trap and trace device if, within forty-eight hours after the installation has occurred, or begins to occur, an order approving the installation or use is issued in accordance with section 3123 of this title."

(b) In the absence of an authorizing order, such use shall immediately terminate when the information sought is obtained, when the application for the order is denied or when forty-eight hours have lapsed since the installation of the pen register or trap and trace device, whichever is earlier.

(c) The knowing installation or use by any investigative or law enforcement officer of a pen register or trap and trace device pursuant to subsection (a) without application for the authorizing order within forty-eight hours of the installation shall constitute a violation of this chapter.

(d) A provider for a wire or electronic service, landlord, custodian, or other person who furnished facilities or technical assistance pursuant to this section shall be reasonably compensated for such reasonable expenses incurred in providing such facilities and assistance.

Sec. 3126. Reports concerning pen registers and trap and trace devices

The Attorney General shall annually report to Congress on the number of pen register orders and orders for trap and trace devices applied for by law enforcement agencies of the Department of Justice.

Sec. 3127. Definitions for chapter

As used in this chapter--

(1) the terms "wire communication", "electronic communication", and "electronic communication service" have the meanings set forth for such terms in section 2510 of this title;

(2) the term "court of competent jurisdiction" means--

(A) a district court of the United States (including a magistrate of such a court) or a United States Court of Appeals; or

(B) a court of general criminal jurisdiction of a State authorized by the law of that State to enter orders authorizing the use of a pen register or a trap and trace device;

(3) the term "pen register" means a device which records or decodes electronic or other impulses which identify the numbers dialed or otherwise transmitted on the telephone line to which such device is attached, but such term does not include any device used by a provider or customer of a wire or electronic communication service for billing, or recording as an incident to billing, for communications services provided by such provider or any device used by a provider or customer of a wire communication service for cost accounting or other like purposes in the

ordinary course of its business;

(4) the term "trap and trace device" means a device which captures the incoming electronic or other impulses which identify the originating number of an instrument or device from which a wire or electronic communication was transmitted;

(5) the term "attorney for the Government" has the meaning given such term for the purposes of the Federal Rules of Criminal Procedure; and

(6) the term "State" means a State, the District of Columbia, Puerto Rico, and any other possession or territory of the United States.

624. JNOS 1.07b not on 73 BBS

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-15 05:18:00 UTC
From: Burt.Kaufman@f40.n382.z1.fidonet.org
Message-ID: <750744012.AA00155@afarm.uucp>
Source record: 51268

With only a 2-3 month lead time available to locate and upload
a version of JNOS (ANY version) 73 Magazine has failed yet
again. Those of you hoping to get the same version of the
JNOS code that Jeffrey Sloman N1EWO is going to use in his
series of articles, are apparently SOL (Short On Luck).
As someone noted last month, the 1.08c version was not
on the 73 BBS. This month, the article (with no explanation
for the change) informed readers that JNOS 1.07b would be
used and was available on the 73 BBS, in the Packet area (#9).
The Packet area is area 8; there still does not appear to be
ANY version of JNOS from the 73 BBS.

IF you have INTERNET access, you may get 1.07b from ucsd.edu.
73 magazine says the directory is \hamradio\packet\tcpip\jnos.
Since ucsd.edu is a UNIX system, I'd guess that the backslashes
(the \) should be slashes (the /), unless someone has got a
neat piece of code running. If the \ character doesn't work,
try the /. Better yet, find a local expert to help with
getting TCP/IP going.

Burt N5SYY

... "Do something special for Mother's Day" - Oedipus
___ Blue Wave/QWK v2.12

625. Re: Public Apology

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-15 06:45:17 UTC
From: kenji@k2r.or.jp
Message-ID: <KENJI.93Oct15154517@reseau.k2r.or.jp>
Source record: 51271

A host's sysop has the final words on what he/she wants to store on
his/her systems. Period.

// Kenji, JJ1BDX/3
--
Kenji Rikitake <kenji@k2r.or.jp> <kenji@rcac.astem.or.jp>
"If privacy is outlawed, only outlaws will have privacy."
-- Philip Zimmermann, PGP User's Guide

626. Re: Public Apology

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-15 06:49:49 UTC
From: kenji@k2r.or.jp
Message-ID: <KENJI.93Oct15154949@reseau.k2r.or.jp>
Source record: 51269

In article <2431@arrl.org> jbloom@arrl.org (Jon Bloom, KE3Z) writes:
|Thanks for the update, Jack. Now I remember why I quit checking into the
|local PBBS. It's interesting to see that the intellectual level of PBBS
|traffic hasn't risen any.

And it's sad to hear that it's not only in Japan that we have to see
silly words on PBBSes :p

// Kenji

--
Kenji Rikitake <kenji@k2r.or.jp> <kenji@rcac.astem.or.jp>
"If privacy is outlawed, only outlaws will have privacy."
-- Philip Zimmermann, PGP User's Guide

627. Guide to the Personal Radio Newsgroups

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-15 11:03:54 UTC
From: pschleck@unomaha.edu
Message-ID: <radio/personal-intro-1-750683028@unomaha.edu>
Source record: 51257
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.info,rec.answers,news.answers

```
Posted-By: auto-faq 2.4
Archive-name: radio/personal-intro
Revision: 1.5 09/18/93 16:49:31
Changes: new mailing lists, .packet rmgroup, and .policy updates

(Note: The following is reprinted with the permission of the author.)

This message describes the rec.radio.amateur.*, rec.radio.cb, rec.radio.info,
and rec.radio.swap newsgroups. It is intended to serve as a guide for the new
reader on what to find where. Questions and comments may be directed to the
author, Jay Maynard, K5ZC, by Internet electronic mail at
jmaynard@oac.hsc.uth.tmc.edu. This message was last changed on 18 September
1993 to add the mailing lists for the new rec.radio.amateur newsgroups, to
note the rmgroup of rec.radio.amateur.packet, and to officially retire some
(in)famous threads of discussion on rec.radio.amateur.policy.

History
=======

Way back when, before there was a Usenet, the Internet hosted a mailing list
for hams, called (appropriately enough) INFO-HAMS. Ham radio discussions
were held on the mailing list, and sent to the mailboxes of those who had
signed up for it. When the Usenet software was created, and net news as we
now know it was developed, a newsgroup was created for hams: net.ham-radio.
The mailing list and the newsgroup were gatewayed together, eventually.

As the net grew, and as packet radio came into vogue, packet discussion began
to dominate other topics in the group and on the list. This resulted in the
logical solution: a group was created to hold the packet discussion, and
another corresponding mailing list was created as well: net.ham-radio.packet
and PACKET-RADIO, respectively.

These two groups served for several years, and went through Usenet's Great
Renaming essentially unchanged, moving from net.ham-radio[.packet] to
rec.ham-radio[.packet]. Readership and volume grew with the rest of the
network.

The INFO-HAMS mailing list was originally run from a US Army computer at
White Sands Missile Range, SIMTEL20. There were few problems with this
arrangement, but one was that the system was not supposed to be used for
commercial purposes. Since one of hams' favorite pastimes is swapping
gear, it was natural for hams to post messages about equipment for sale
to INFO-HAMS/rec.ham-radio. This ran afoul of SIMTEL20's no-commercial-use
restriction, and after some argument, a group was created specifically
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for messages like that: rec.ham-radio.swap. This group wasn't gatewayed to a mailing list, thus avoiding problems.

While all this was happening, other folks wanted to discuss other aspects of the world of radio than the personal communications services. Those folks created the rec.radio.shortwave and rec.radio.noncomm newsgroups, and established the precedent of the rec.radio.* hierarchy, which in turn reflected Usenet's overall trend toward a hierarchical name structure.

The debate between proponents of a no-code ham radio license and its opponents grew fierce and voluminous in late 1989 and 1990. Eventually, both sides grew weary of the debate, and those who had not been involved even more so. A proposal for a newsgroup dedicated to licensing issues failed. A later proposal was made for a group that would cover the many recurring legal issues discussions. During discussion of the latter proposal, it became clear that it would be desirable to fit the ham radio groups under the rec.radio.* hierarchy. A full-blown reorganization was passed by Usenet voters in January 1991, leading to the overall structure we now use.

After the reorganization, more and more regular information postings began to appear, and were spread out across the various groups in rec.radio.*. Taking the successful example of the news.answers group, where informational postings from across the net are sent, the group rec.radio.info was created in December, 1992, with Mark Salyzyn, VE6MGS, initially serving as moderator.

In January, 1993, many users started complaining about the volume in rec.radio.amateur.misc. This led to a discussion about a second reorganization, which sparked the creation of a mailing list by Ian Kluft, KD6EUI. This list, which was eventually joined by many of the most prolific posters to the ham radio groups, came up with a proposal to add 11 groups to the rec.radio.amateur hierarchy in April 1993. The subsequent vote, held in May and early June, approved the creation of five groups: rec.radio.amateur.digital.misc (to replace .packet), .equipment, .homebrew, .antenna, and .space.

The Current Groups

I can hear you asking, "OK, so this is all neat history, but what does it have to do with me now?" The answer is that the history of each group has a direct bearing on what the group is used for, and what's considered appropriate where.

The easy one is rec.radio.amateur.misc. It is what rec.ham-radio was renamed to during the reorganization. Any message that's not more appropriate in one of the other groups belongs here, from contesting to DX to ragchewing on VHF to information on becoming a ham.

The group rec.radio.amateur.digital.misc is for discussions related to (surprise!) digital amateur radio. This doesn't have to be the common two-meter AX.25 variety of packet radio, either; some of the most knowledgeable folks in radio digital communications can be found here, and anything in the general area is welcome. The name was changed to emphasize

this, and to encourage discussion not only of other text-based digital modes, such as AMTOR, RTTY, and Clover, but things like digital voice and video as well. The former group, rec.radio.amateur.packet, should be removed by September 21st, 1993. It is obsolete, and you should use .digital.misc instead (or the appropriate new mailing list, mentioned below). The group has .misc as part of the name to allow further specialization if the users wish it, such as .digital.tcp-ip.

The swap group is now rec.radio.swap. This recognizes a fact that became evident shortly after the original group was formed: Hams don't just swap ham radio gear, and other folks besides hams swap ham equipment. If you have radio equipment, or test gear, or computer stuff that hams would be interested in, here's the place. Equipment wanted postings belong here too. Discussions about the equipment generally don't; if you wish to discuss a particular posting with the buyer, email is a much better way to do it, and the other groups, especially .equipment and .homebrew, are the place for public discussions. There is now a regular posting with information on how to go about buying and selling items in rec.radio.swap; please refer to it before you post there.

The first reorganization added two groups to the list, one of which is rec.radio.amateur.policy. This group was created as a place for all the discussions that seem to drag on interminably about the many rules, regulations, legalities, and policies that surround amateur radio, both existing and proposed. Recent changes to the Amateur Radio Rules (FCC Part 97) have finally laid to rest the Great Usenet Pizza Autopatch Debate as well as complaints about now-preempted local scanner laws hostile to amateurs, but plenty of discussion about what a bunch of rotten no-goodniks the local frequency coordinating body is, as well as the neverending no-code debate, may still be found here.

The other added group is rec.radio.cb. This is the place for all discussion about the Citizens' Band radio service. Such discussions have been very inflammatory in rec.ham-radio in the past; please do not cross-post to both rec.radio.cb and rec.radio.amateur.* unless the topic is genuinely of interest to both hams and CBers - and very few topics are.

The rec.radio.info group is just what its name implies: it's the place where informational messages from across rec.radio.* may be found, regardless of where else they're posted. As of this writing, information posted to the group includes Cary Oler's daily solar progagation bulletins, ARRL bulletins, the Frequently Asked Questions files for the various groups, and radio modification instructions. This group is moderated, so you cannot post to it directly; if you try, even if your message is crossposted to one of the other groups, your message will be mailed to the moderator, who is currently Mark Salyzyn, VE6MGS. The email address for submissions to the group is rec-radio-info@ve6mgs.ampr.ab.ca. Inquires and other administrivia should be directed to rec-radio-request@ve6mgs.ampr.ab.ca. For more information about rec.radio.info, consult the introduction and posting guidelines that are regularly posted to that newsgroup.

The groups rec.radio.amateur.antenna, .equipment, .homebrew, and .space are for more specialized areas of ham radio: discussions about antennas,

commercially-made equipment, homebrewing, and amateur radio space operations. The .equipment group is not the place for buying or selling equipment; that's what rec.radio.swap is for. Similarly, the .space group is specifically about amateur radio in space, such as the OSCAR program and SAREX, the Shuttle Amateur Radio EXperiment; other groups cover other aspects of satellites and space. Homebrewing isn't about making your own alcoholic beverages at home (that's rec.crafts.brewing), but rather construction of radio and electronic equipment by the amateur experimenter.

Except for rec.radio.swap and rec.radio.cb, all of these newsgroups are available by Internet electronic mail in digest format; send a mail message containing "help" on a line by itself to listserv@ucsd.edu for instructions on how to use the mail server.

All of the groups can be posted to by electronic mail, though, by using a gateway at the University of Texas at Austin. To post a message this way, change the name of the group you wish to post to by replacing all of the '.'s with '-'s - for example, rec.radio.swap becomes rec-radio-swap - and send to that name@cs.utexas.edu (rec-radio-swap@cs.utexas.edu, for example). You may crosspost by including multiple addresses as Cc: entries (but see below). This gateway's continued availability is at the pleasure of the admins at UT-Austin, and is subject to going away at any time - and especially if forgeries and other net.abuses become a problem. You have been warned.

A Few Words on Crossposting
==========

Please do not crosspost messages to two or more groups unless there is genuine interest in both groups in the topic being discussed, and when you do, please include a header line of the form "Followup-To: group.name" in your article's headers (before the first blank line). This will cause followups to your article to go to the group listed in the Followup-To: line. If you wish to have replies to go to you by email, rather than be posted, use the word "poster" instead of the name of a group. Such a line appears in the headers of this article.

One of the few examples of productive cross-posting is with the rec.radio.info newsgroup. To provide a filtered presentation of information articles, while still maintaining visibility in their home newsgroups, the moderator strongly encourages cross-posting. All information articles should be submitted to the rec.radio.info moderator so that he may simultaneously cross-post your information to the appropriate newsgroups. Most newsreaders will only present the article once, and network bandwidth is conserved since only one article is propagated. If you make regular informational postings, and have made arrangements with the moderator to post directly to the group, please cross-post as appropriate.

--
Jay Maynard, EMT-P, K5ZC, PP-ASEL | Never ascribe to malice that which can
jmaynard@oac.hsc.uth.tmc.edu | adequately be explained by stupidity.
"If my car ran OS/2, it'd be there by now" -- bumper sticker
GCS d++ p+ c++ l+ m+/- s/++ g++ w++ t+ r

--
73, Paul W. Schleck, KD3FU

pschleck@unomaha.edu

Celebrating 60 years of the Univ. of Maryland ARA - W3EAX (1933-1993)

628. Re: Macintosh & Packet: Need HELP!

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-15 13:49:46 UTC
From: martinbw@jackatak.raider.net
Message-ID: <N0RgBc1w165w@jackatak.raider.net>
Source record: 51286

fsrla@aurora.alaska.edu writes:

> Hello, I'm new to this area and was wondering if
> anyone could tell me what they think would be a
> cheap, but affective Packet set-up for a Macintosh
> running System 7. I don't see much talk about using
> a Mac for packet, but it's the only computer in our
> house.
> Any help would be apriciated.....thanks!
> ROG!
> FSRLA@AURORA.ALASKA.EDU
>

I use a KAM and HostMaster II for the mac and it works quite well.
You will need to buy a hardware handshake modem cable for best results.
You can build one or buy them from several places. DataSpec manufactures
the one that I use. If you need any additional help send e-mail.

Hope this helps,
73 de Bruce/KQ4TV

****
* Bruce W. Martin Internet: martinbw@jackatak.raider.net *
* 4558 Brooke Valley Dr. AOL: Dragon16 *
* Hermitage TN 37076-2650 HAM Call: KQ4TV *
* Voice: (615) 872-9942 Work: (615) 244-2022 *
* FAX/MODEM: (615) 885-4182 *
****

629. Re: Z-80B CPU and SIO/0 Source?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-15 18:55:06 UTC
From: dts@world.std.com
Message-ID: <CEyCJv.529@world.std.com>
Source record: 51259

A company called ACP (1-800-FONE-ACP) sells the Z80 chips the original poster is looking for. They have both the 8 MHZ CPU and the matching SIO/0, and they are in CMOS.

In addition to using parts that are proper for the speed you are running, the CMOS will cut down on power consumption, which is a real concern for sites running on solar or emergency backup power...

--

Daniel Senie Internet: dts@world.std.com
Daniel Senie Consulting n1jeb@world.std.com
508-365-5352 Compuserve: 74176,1347

630. The header standard

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-15 18:58:13 UTC
From: enge@almaden.ibm.com
Message-ID: <19931015.115952.233@almaden.ibm.com>
Source record: 51260

Here is the original header standard. The '$:' was added later
after BIDs were invented :-)

Roy, AA4RE

****

R:870114/0819p S:870114/1206p AA4RE-1, Gilroy, CA -- 4983/NK6K
R:870113/1606 @:NK6K Redondo Beach, CA #: 4104 O:NK6K F:145.36/.01

Headers - a compromise proposal.
(1/13/87)
Note: These comments are necessarily terse, to make them easier to
forward. This proposal is based on input from VE3GYQ, W3IWI,
NK6K, WB6KAJ, and WB6YMH.

Executive summary.

A standard header format is proposed that permits 1) machine
parsable headers, 2) human readability, 3) extendability
4) standard non-standard information.

Why we need a standard.

There are at least two programs waiting to be written that
require a machine readable header. One is a subroutine for BBSes
that can find the originating BBS and send a service message
back. The other is a FWD.TNC file generator that can determine
paths and connectivity by examining passing headers. There are
more.

There is also a desire on the part of sysops to be able to rapidly
scan a message by eye to look for bad routing, loops, dups, and
delays. This task could be done programatically, but won't be
for some time to come, and will never be performed by simpler
programs on smaller machines.

Why the current standards are not sufficient.

Aside from the Sent and Received times, the R:S: format as
current specified does not provide an easy way to programatically
determine the following pieces of information: Originating User,
message number. These items have been stated as necessary by a
number of BBS sysops.

The /this/that/ standard does not provide enough visual fidelity
to permit the eyeball scan to take place. This is the reason
most often cited for the lack of converts to this standard. The

other shortfall is the lack of ability to add regional information in a standard way. Some areas or networks want additional information such as frequencies and grid, areacode, airport, or other positional identifiers. In a fixed field format where the item is identified by its location, null fields would abound when handling several optional special items, e.g. /call/call/city/state/rtime////freq///stime/.

As of late, there are at least three different versions of the /that/that/ "standard", one with an area code field, one with a separate state field, and one without either. This of course invalidates an otherwise acceptable standard due to its dependence on field order.

Attributes of an acceptable standard.

Based on the stated wishes of developers, the following are the requirements of a well-formed header: Each field can be identified by a program. Some fields are required.

Based on the stated wishes of some Sysops/Users, the requirements are: the header is eyeball-readable, the individual sysop can add information to suit his local needs.

Stated more formally:

1. Meet FCC third party requirements (whatever they are)
2. Be compatible with existing software (able to be emitted)
3. Be machine readable (read: easy to parse)
4. Provide all necessary information
5. Provide flexibility for optional information
6. Provide some degree of user friendliness (read: looks nice)

Note: These comments are necessarily terse, to make them easier to forward. This proposal is based on input from VE3GYQ, W3IWI, NK6K, WB6KAJ, and WB6YMH.

The proposal.

These requirements are not mutually exclusive. Rather than use the fixed field/positional style of the /this/that/ standard to meet the machine readable requirement, a field identifier is proposed for each field. Note that the R:S: standard is already close to this. The only thing lost over the /this/that/ format is some efficiency, more characters are sent. Losses of efficiency are common when humans are involved.

Proposed header format (for the machine readable camp):

<header line> ::= <header field> [<header field>...]
<header field> ::= <field identifier> <field contents>
<field identifier> ::= <field type> ':'
<field type> ::= any printable ASCII character except ':'
<field contents> ::= a string of printable ASCII characters except ':'

Rules:
1. The ':' character may only be used as the termination character of a field type specifier

2. The minimum items which should be included in ALL headers are:
a) The callsign of the node relaying the message.
b) The time the message was received.

Items very (very) strongly recommended for all headers:
a) the message number of the relaying node.
b) the callsign of the station originating the message.
c) the location of the node relaying the message.

Optional information:
a) Additional location information
1. Grid squares
2. Area codes
3. longitude/latitude
b) Frequency of operation of node
c) time message was sent by node
d) Network name
e) group name
f) Major maildrop (nearest major node)

Field Identifiers: (Note new field types may be defined as required)

#: message number
@: Node callsign followed by optional location
A: node ALIAS
F: frequency of operation. If gateway multiple frequencies are separated by "/"
G: Grid square of node
L: Long/Lat of node
M: Major node callsign (nearest major relaying node, the APR proposal)
N: Group, node, or network name
O: callsign of originating station
P: Telephone Area code of node
R: Time message was received
S: Time message was sent

While many of the above fields may be deemed of value by different people the following suggested format is recommended

R:861003/0739z @:W1BBS Packet city, KA #:1234 O:W1ABC

Note if the timezone letter is not included it should be replaced with a space to preserve field alignment for visual fidelity.

This header line provides the minimum information which is deemed necessary by large number of SYSOPs, based on current discussions.

The proposed header format allows much flexibility for the individual sysop's without compromising the ability of software to extract the needed information. Following is an example of different headers which conform to this standard. Visual fidelity and machine readability is maintained.

R:861003/0701z @:KB3UD, East Bangor, Pa, G:FN20jv
R:861003/0641z @:K3RLI Wilkes-Barre, PA F:145.01/145.05
R:861003/0430 @:N2AYY-1 Glens Falls, NY O:W1ABC
R:861002/2040z @:WA1FHB, Marlow NH #:5432
R:861002/1741z @:WB1DSW O:W1ABC S:861002/2039z
R:861002/1523z @:W9ZRX #:8768
R:861001/1240 @:WB6KAJ
R:861001/1836 @:W6AXM-1 M:WB6KAJ O:W1ABC P:714

Final Notes: The above differs from the current R:S: standard in that the S: field is missing from the first part. For visual fidelity to be maintained, all stations must agree to use the first two fields in that order. Those wishing to send the S: field may do so later in the header. Dropping the S: from the required fields is based on the premise that the S: field of a station can be inferred from the R: field of the next station.

The RLI/MBL format for the minimum required format is:

R:$J/$Kz @:$O location #:$M O:$P

The "z" is replaced by a space if the BBS uses local time.

631. Re: WX FAX with PK232?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-15 20:07:43 UTC
From: erik@vanbc.wimsey.com
Message-ID: <29mvuf$bsr@vanbc.wimsey.com>
Source record: 51261

The fax capabilities of the PK-232 are rather limited. It is not mentioned in the documentation for the hardware, but the AEA software documentation mentions that the PK-232 drops two of every three lines of a WEFAX. That renders the received faxes almost unreadable.

Of course, I bought the AEA software before I found out about this!

The AEA-FAX is much better. I have even received satellite images on 9.090 MHz that were absolutely clear.

So, don't bother with the AEA software for the PK-232MBX. In my opinion, it is not worth the price.

73 de VE7MDL (VE0MDL@VE7KIT on packet) ....Erik.

632. Re: Has anyone put a "login: " on the air? (XENIX)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-15 20:34:43 UTC
From: bruce@pixar.com
Message-ID: <1993Oct15.203443.12426@pixar.com>
Source record: 51264

I'm running Linux (free Unix) and WAMPES (a Unix port of KA9Q).
If you telnet or connect to it, WAMPES logs you into Linux.
It can handle multiple connections. If there's no login for your callsign, it
creates one. By editing the password file or the user's startup script, you
can arrange for particular users to go directly to the BBS or another program
instead of to Linux.

I've only had it up for a few days, and it's not going to be very useful until
I set up an antenna outdoors, but it works fine. Linux will be moving AX.25
into the kernel shortly.

You can get WAMPES from ucsd.edu:/hamradio/packet/wampes, there may be a
more recent version in ucsd.edu:/hamradio/packet/incoming. If you are
interested in Linux, start reading the comp.os.linux newsgroups.

Bruce Perens KN6TX/AE (Formerly KD6OTD/AE, soon AC6??) Bruce@Pixar.com510-215-3502

633. Re: Multiple TNCs on same frequency

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-15 21:15:01 UTC
From: agodwin@acorn.co.uk
Message-ID: <27259@acorn.co.uk>
Source record: 51262

In article <750648057snx@llondel.demon.co.uk> dave@llondel.demon.co.uk writes:
>
>It is quite possible to run NOS and an AX25 packet BBS on the same machine.
>If you run the BPQ network switch on the PC and run Desqview, you can get
>NOS to coexist quite happily in a Desqview window with BBS software in other
>windows. I have successfully run RLI/YFB/FBB software alongside various
>versions of NOS in this way.
>

It works, but performance may be disappointing - my local IP switch runs
this way, and even though the BBS is used only to serve IP users with
a more complete system than NOS's native BBS provides (the AX25 users are
served by a different station), performance can be abysmal.

As an example, I got a 17 second initial ping (i.e. including the arp)
time last night. No packets lost, but incredibly slow response.
I suspect this is because the BPQ switch buffers up the packets OK, but
they aren't processed by the other software until desqview chooses to
switch tasks. If a short timeslice is used, poor efficiency results.
If a long timeslice is used, latency is long.
I imagine deskview has no way of adjusting the time given to the various
tasks dynamically, since it can't know what they're waiting for.

You may get away with this for a BBS system that provides IP access,
and it may be possible to tune the system for better throughput,
but I wouldn't recommend it if you're doing IP routing.

-adrian

634. Re: Data compression for packet?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-15 22:16:45 UTC
From: david@djwhome.demon.co.uk
Message-ID: <750748605snx@djwhome.demon.co.uk>
Source record: 51283

In article <294ag2$ad3@hpchase.rose.hp.com> cmoore@rose.hp.com (Chris Moore) writes:
>Correct me if I'm wrong (I'm sure someone will :-), but I seem to remember
>that Lempel-Zev requires characterizing the distribution of data in the
>entire file first.

I think you are getting confused with Huffman coding, which gives best results if you analyse the whole file, but can be run with fixed tables based on the known characteristics of the data (FAX uses a fixed Huffman coding table).

LZW and I think LZ effectively back reference previous strings. V.42bis compression is based on one of these, and that is being used in this sort of application. (Note hardware implementations of V.42bis are covered by a patent. The position on software implementations of these types of algorithm, e.g. COMPRESS, is confused.)

I am a little confused about what algorithm GZIP uses, so I can't comment on it, but a lot of file compression schemes used LZ* followed by Huffman.
--
David Woolley, London, England david@djwhome.demon.co.uk

635. Re: Packet Standards

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-15 23:23:25 UTC
From: brian@nothing.ucsd.edu
Message-ID: <29nbddINN53t@network.ucsd.edu>
Source record: 51266

There's been an ARFC (Amateur RFC) directory on UCSD for several years,
created when this subject last came up. So far there's nothing in it
because no one has written any yet.
- Brian

636. Model 102 as baycom modem tnc??

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-16 02:42:55 UTC
From: "Eleen N. Kamas" <ee2g+@andrew.cmu.edu>
Message-ID: <0gjpyje00iUy8BbVg=@andrew.cmu.edu>
Source record: 51267

Has anyone hooked a baycom serial port modem up to a TRS-80 modem
102 laptop computer? If so where can I find the 'soft tnc' software?

Thanks
Chuck N3QAT
ee2g+Charles@andrew.cmu.edu

637. Re: Multiple TNCs on same frequency

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-16 11:57:50 UTC
From: dave@llondel.demon.co.uk
Message-ID: <750797870snx@llondel.demon.co.uk>
Source record: 51272

In article <27259@acorn.co.uk> agodwin@acorn.co.uk (Adrian Godwin) writes:
>In article <750648057snx@llondel.demon.co.uk> dave@llondel.demon.co.uk writes:
>>
>>It is quite possible to run NOS and an AX25 packet BBS on the same machine.
>>If you run the BPQ network switch on the PC and run Desqview, you can get
>>NOS to coexist quite happily in a Desqview window with BBS software in other
>>windows. I have successfully run RLI/YFB/FBB software alongside various
>>versions of NOS in this way.
>>
>
>It works, but performance may be disappointing - my local IP switch runs
>this way, and even though the BBS is used only to serve IP users with
>a more complete system than NOS's native BBS provides (the AX25 users are
>served by a different station), performance can be abysmal.
>
>As an example, I got a 17 second initial ping (i.e. including the arp)
>time last night. No packets lost, but incredibly slow response.
>I suspect this is because the BPQ switch buffers up the packets OK, but
>they aren't processed by the other software until desqview chooses to
>switch tasks. If a short timeslice is used, poor efficiency results.
>If a long timeslice is used, latency is long.
>I imagine deskview has no way of adjusting the time given to the various
>tasks dynamically, since it can't know what they're waiting for.
>
The system here currently runs FBB5.15/WNOS4.0b/BPQ4.06k under DV2.42. I can
get pings of <4 secs on a fairly busy link freq. AFAIK all the bits of s/w are
DV-aware and will give up timeslices when waiting. Try running the BPQ IP
router in another DV window to handle most of the routeing, and only direct
the minimum stuff to the NOS window.

>You may get away with this for a BBS system that provides IP access,
>and it may be possible to tune the system for better throughput,
>but I wouldn't recommend it if you're doing IP routing.
>
My system happens to be the main IP router for the local area........

Last comment is that it runs a six-port switch on a 33MHz 386DX. Your mileage
may vary.

Dave
--

****
* G4WRW @ GB7WRW.#41.GBR.EU AX25 * Start at the beginning. Go on *
* dave@llondel.demon.co.uk Internet * until the end. Then stop. *

```
* g4wrw@g4wrw.ampr.org Amprnet * (the king to the white rabbit) *
************************************************************************
```

638. Re: info on cellular mods - illegal? YES!

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-16 12:51:23 UTC
From: mark@ve6mgs.ampr.ab.ca
Message-ID: <CEzqDn.Jun@ve6mgs.ampr.ab.ca>
Source record: 51274

henniger@Metaphor.COM (Mickey Henniger) writes:

>If the modification were to allow the radio to receive cellular communication,
>this also would not be illegal, since it is not illegal to receive cellular
>communication -- if you do not intend to listen to the conversation (there is
>more than just conversations going on in this frequency range.)

Read Section 2512 (and others if you care for more context) of the ECPA
recently posted to the various groups (Thanks to Brian Kantor for providing
the copy for rec.radio.info). If Packet Radio is considered a publication
media, which I believe it is, as they imply dissemination of information on
how to tap either wire or `Electronic' telephone communications, then
distributing Cellular Mods can be punished with a fine of $10,000 and
5 years in prison!

What a fine mess you Americans are in!

Ciao -- 73 de VE6MGS/Mark

639. RAC Bulletins in Electronic Form?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-16 13:02:21 UTC
From: mark@ve6mgs.ampr.ab.ca
Message-ID: <CEzqvx.K1n@ve6mgs.ampr.ab.ca>
Source record: 51273
Cross-posted to: rec.radio.info,rec.radio.amateur.misc,rec.radio.amateur.digital.misc

I am breaking from tradition, and allowing MY request for information to
be cross-posted to rec.radio.info. Since it is an administrivia request
for the group of rec.radio.info, I feel it is justified as part of running
the information only news group.

I have had a rash of recent requests for some electronic access to the
Radio Amateurs of Canada (RAC) Bulletins and Articles. I will be endeavoring
to find a local source, if possible, but would also appreciate any effort
by someone else to be a provider of this information to the rec.radio.info
news group. Please contact rec-radio-request@ve6mgs.ampr.ab.ca if you have
access!

Thanks, Ciao, 73 de VE6MGS/Mark mark@ve6mgs.ampr.ab.ca|mark@adec23.UUCP
- Entries to the Amateurs on USENET List: hams-on-usenet@ve6mgs.ampr.ab.ca
- Postings to rec.radio.info: rec-radio-info@ve6mgs.ampr.ab.ca
- rec.radio.info administrivia: rec-radio-request@ve6mgs.ampr.ab.ca
"Give any one species too much rope, and they'll **** it up"
`Too much Rope' Amused to Death, Roger Waters

640. Looking for VHF packet equipment recommendations

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-17 01:38:46 UTC
From: mau@herky.cs.uiowa.edu
Message-ID: <1993Oct17.013846.16926@news.uiowa.edu>
Source record: 51275

Hi
I just got my technician license and I am trying to collect info for packet
radio equipment while I am waiting for the magic paper to arrive.

Since I have no idea about VHF equipment I bought a few magazines and I
read the FAQ. Well I think that I have some idea of what I am looking for
but if you think that I am looking for the wrong setup please tell me so.
I am interested in a portable VHF packet station which I could operate
with out AC power.

THe setup I am thinking of is the following.
1) a handhelp VHF radio that I can also use for voice communications
2) A battery or battery/AC operated TNC. I am only interested in VHF packet
so I need a TNC which has the minimum number of operating modes and features.
3) VHF active antenna. I need an active antenna because I found that there is
too much interference where I live.
I show some ads for a MFJ or MJF?? active antenna which
operates up to 200 Mhz and can be used for HF as well, so I can use with my
Sony sw receiver.
3) A laptop or handheld msdos computer. I would prefer to use my Tandy 100
but I do not know if I can find software for it.

SO I am looking for recommendation for the following equipment
1) VHF handheld radios price up to $300
2) VHF TNCs price up to $150
3) active antennas price up to $100

You may e-mail me any comments or you can post to this group.

Napoleon
mau@herky.cs.uiowa.edu

--

Napoleon Mau
mau@herky.cs.uiowa.edu
---

641. SCDX 2189

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-17 01:54:51 UTC
From: p00489@psilink.com
Message-ID: <$scdx.2189@ampr.org>
Source record: 51281
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.info

```
::::::::::::::::::::::::::::::::::::
:: MediaScan ::
:: SWEDEN CALLING DXERS ::
:: from Radio Sweden ::
:: Number 2189--Oct. 19, 1993 ::
::::::::::::::::::::::::::::::::::::
```

Satellite, shortwave and other electronic media news from Radio Sweden.

This week's bulletin was written by George Wood.

Packet Radio BID SCDX2189

All times UTC unless otherwise noted.

NORDIC MEDIA NEWS:

NORTH STAR--We've reported before on a proposal before the Nordic Council for a joint Nordic television channel. Those plans took a concrete form Friday (October 15), when the public service broadcasters of Sweden, Norway, Finland, and Iceland presented a formal proposal. Should the prime ministers of the four countries approve the project at a meeting next month, the broadcasters say the Nordic satellite channel "Nordstjarnan", or "North Star", could be on the air by the end of 1994 or early 1995.

As a satellite channel, it would only be available to cable subscribers or home dish owners, at a cost of around 7 dollars a month. Some films and other more attractive programming would be offered for an additional charge.

The fifth Nordic country, Denmark, is not participating in the project because the channel would not be available to all viewers. The Danes would prefer to strengthen the current Nordvision co-operation. (TT and "Pressens Tidning")

SWEDISH COMMERCIAL RADIO--We reported last time on the allocation of the first commercial radio frequencies in Sweden, which were awarded in an auction solely on the basis of the highest bids.

Now the Local Radio Licencing Board has asked that more frequencies be allocated northern and central Sweden, especially in Norrkoping, to the southwest of Stockholm, Uppsala, just north of the capital, and Umea in the far north. All three cities received frequencies for two stations, so that there would be some competition, or at least alternatives for potential advertisers. But the highest bidder auction system worked against that ambition.

In Norrkoping the same group won bids for both channels, while a local newspaper bought both licences in Umea. A Christian fundamentalist group won one frequency in Uppsala, and since they don't plan to carry ordinary advertising, the Licencing Board is afraid the remaining broadcaster will have a monopoly on advertising rates.

The auction for licences in southern and western Sweden will be held in early December. Five channels will be allocated in Gothenburg, and two each in 9 other cities. (TT, "Pressens Tidning", and "Journalisten")

SWEDISH COMMUNITY RADIO--Sweden's Community Radio Board has threaten to fine three community radio stations for illegally carrying networked news from the Swedish news agency TT. The community radio law says centrally produced programming can only be used "to a limited extent", which the board has interpreted to mean that carrying a short bulletin of networked news once an hour is forbidden.

The stations have objected to this interpretation. Altogether 20 Swedish community radio stations are relaying news from TT. (TT)

SWEDISH RADIO--Sweden's public service radio broadcaster, Swedish Radio, is investigating introducing a national program in the Finnish language after digital radio is introduced here in 1995. The largest immigrant group in Sweden comes from Finland, and Finnish programming currently accounts for around 2 and a half hours a day on Swedish Radio's Program 2. That channel primarily offers classical music, but also carries minority language and educational programming. In Stockholm these have been shifted onto other transmitters, and Program 2 in the capital is a 24 hour classical channel. Swedish Radio hopes to extend this service nationally when digital radio is introduced. (TT)

THOR--We've often mentioned Norway's Thor satellite, which offers a Scandinavian package of CNN, Eurosport, the Children's Channel, Discovery, MTV, and Filmnet Movies, however using obscure encoding systems generally found only in Norway. Now Filmnet has begun distributing Thor subscriptions in Sweden, for around 8 dollars a month. However, Filmnet may also be involved in a European version of Sky's Multi-Channel package, called "Multi-Choice Kaleidoscope". (Bertil Sundberg in "Elektronikvaerlden")

EUROPEAN MEDIA NEWS:

ASTRA--The Adult Channel has left transponder 26, home of Sky Movies Gold and Radio Sweden. TV Asia now occupies this transponder continuously between 23:00 and 17:00 hrs UTC. TV Asia has stopped broadcasts from transponder 8, and Sky One now continues there until 01:00 hrs UTC daily.

Some British local ILR stations are to appear on the Discovery and Bravo transponders in the near future. (James Robinson)

QVC began its broadcasts on Astra transponder 38 as scheduled on October 1st. The transmissions are encoded in Videocrypt. (James Robinson)

British Sky Broadcasting has been publicly rapped by the Independent Television Commission's Television Advertising Complaints report for August

1993 over TV adverts for its multichannel offering.

The complaints centered around BSkyB's claims that 14 channels were being added into the Multichannels package, and that nine of them had never previously been carried on satellite. Complainants pointed out that some channels would not be encrypted on the launch date and would remain available without payment of a subscription fee, others would not be on the air at the time of launch, and that some of the channels claimed to be available for the first time on satellite had been, in fact, carried on Intelsat and Eutelsat satellites for some time. ("Satnews")

EUTELSAT--Egyptian Television's long-awaited international channel seems to be about to start. James Robinson reports low-powered test signals from Nile TV International on Eutelsat 2-F3, on 11.146 GHz. This same satellite also carries the Egyptian Space Channel, and other Middle Eastern broadcasters from Turkey, Morocco and Tunisia. Telepace has also moved to this satellite, replacing RTP. An Algerian network was to transmit on the Telepace transponder. (James Robinson) But BBC Monitoring recently reported that those plans have been postponed.

Portugal's RTP has joined Italian, Spanish, and Turkish channels on Eutelsat 2-F2. (James Robinson)

RTL--Luxembourg's RTL Television is to begin relays of its French service by satellite soon. The choice is between Astra, Eutelsat, and France's Telecom satellite. RTL currently broadcasts to eastern France from Luxembourg and is also carried on some French cable networks. (AFP via BBC Monitoring)

MCM--MCM Euromusique is determined to introduce encryption for its 24-hour music service from October 15th. After being forced off the air for some time because of financial problems, the station is determined to remain "on air" in the future. It will be encrypting its signal in D2-MAC/Eurocrypt-M, and annual Europe-wide subscriptions will be a FFr150 one-off payment for the smart card, followed by FFr200 per year. ("Satnews") This apparently refers to the on-again, off-again D2-MAC signals on TDF1 on 11.727 GHz, which have been in the clear. MCM is also part of the Canal Satellit Nagravision package on Telecom 2A.

HISPASAT--Two new television channels, one with cultural programs, the other with exclusively sports programs, are to begin broadcasts on Spain's Hispasat satellites in December. They will be operated by the public RTVE and are to be in the clear. (RNE via BBC Monitoring)

HDTV--Broadcasters and regulatory authorities in Europe are working together to find a common standard for digital high definition (HDTV) services. A memorandum of understanding has been signed by a group of satellite operators, broadcasters, manufacturers and regulators, with the signing ceremony in Bonn, Germany.

The group, known as the European Launching Group for Digital Video Broadcasting (DVB) project, comprises of 85 members including one Japanese electronics firm. ("Satnews")

MIDDLE EASTERN MEDIA NEWS:

ARABSAT--Arabsat, the Arab Satellite Communications Organisation, has signed a USD 104 million loan with eight banks to part-finance the building and launch of two new satellites. Aerospatiale, the French aerospace company, is building the satellites at a total cost of USD 258 million. The first satellite is set to be launched in 1996, with the other to be mothballed for an unspecified period.

The loan has been syndicated primarily through Middle Eastern banks. Arabsat is paying cash for around 60 percent of the total satellite's cost from existing cash reserves. "(Satnews")

AFRICAN MEDIA NEWS:

SOUTH AFRICA--Sky News was due to start 12 hours a day of broadcasts to South Africa, beginning October 3rd. Using a relay from Intelsat, the broadcasts are on the SABC's CCV channel. CNN is also carried on CCV. Sky plans to increase its African coverage beyond South Africa. ("Business Day" via BBC Monitoring)

ASIAN MEDIA NEWS:

STAR-TV--At the annual meeting of News Corporation, media tycoon Rupert Murdoch announced the splitting of his new Asian aquisition, Star-TV, into four divisions, one each for China, India, Indonesia and the Middle East. Murdoch also reported his Fox cable channel in the United States plans to begin service on March 1st to between 20 million and 30 million homes. Fox has also launched a small cable channel to South America, while Europe's Sky News has just started a service to South Africa (see above).

The Hong Kong-based Star-TV faces problems following China's recent announcement of new rules limiting access to satellite dishes, including a virtual ban on purchases or installations by individuals who had been snapping up dishes to pull down foreign television broadcasts.

The past two years have seen an explosion of foreign satellite television in China, posing a serious threat to the Communist government's information monopoly. Department stores and other shops took advantage of a dearth of explicit regulations and sold tens of thousands of low-cost satellite dishes. (Reuters)

ASIASAT--Star-TV plans to expand when the Asiasat-2 satellite is launched in early 1995. Australia's most profitable commercial TV network, the Nine Network, has taken options on 10 transponders on the new satellite, half the high-powered transponder capacity. The satellite's footprint is planned to extend from Japan to the Middle East and south to Australia. ("World Broadcast News")

PALAPA--Asia's first business television channel will begin broadcasting next month. Among the owners of Asia Business News are Dow Jones, the American cable giant TCI, Television New Zealand, and the Singapore Broadcasting Corpation. The channel will transmit on Indonesia's Palapa B2P satellite. CNN, the sports channel ESPN, Home Box Office, and Australia Television

International already use Palapa. ("Satnews")

BBC--The BBC has formed a joint venture with a Japanese trading company to launch a Japanese version of World Service Television (WSTV) early in 1994. Signing the agreement with Nissho Iwai, Japan's seventh-largest trading company, is a break with tradition for the British state-owned broadcaster which is usually reticent about forming alliances with profit-making organisations.

A new company has been formed for the joint venture. Nissho will be the majority partner in Satellite News Corporation, and it will act as the advertising agent for BBC WSTV. The BBC will retain the final control on editorial matters. WSTV will initially be available to cable and satellite viewers in the region, although a deal is understood to being made with one of Japan's six terrestrial broadcasters for retransmission rights. ("Satnews")

NORTH AMERICAN MEDIA NEWS:

MEDIA MERGERS--In the United States, the competition between Viacom and QVC to buy Paramount Communications has been eclipsed by one of the biggest corporate mergers in history, between the country's largest cable operator, TCI, and Bell Atlanta, which operates the telephone networks in the Middle Atlantic states. Together, the two companies serve 42 percent of the American population.

While Bell Atlantic has expertise in two-way audio technology, TCI's strength is in sending multiple video signals, with a wide variety of programming. Together, as they install high-capacity fiber optic networks across the country, they will eventually be able to offer users a vast array of new entertainment and information technologies, including hundreds of cable TV channels, pay-per-view movies on demand, video games with competitors thousands of miles away, armchair shopping, two-way educational programs, and research access to vast databases.

Media analysts say the merger is likely to speed access to a national "information superhighway", but consumer advocates warn that it could also create less competition, driving up users' rates. The deal also includes TCI's programming company Liberty Media, which partly owns the shopping network QVC. Experts say the merger may strengthen QVC's bid to buy Paramount.

Recently the telephone company serving New York and New England, Nynex, bought into QVC's Paramount rival Viacom, which besides being a major cable operator, also owns MTV, VH-1, and Nickelodeon. In a similar move, the US West telephone company is investing in America's second largest cable operator, entertainment giant Time-Warner. ("San Francisco Chronicle", "New York Times", and "San Jose Mercury News")

REGIONAL NEWS CHANNELS--King Broadcasting, which owns four television stations in the Pacific Northwest, says that it is to launch a 24-hour cable news channel specialising in regional coverage. Around 1.5 million viewers will be able to tune into the service, known as Northwest Cable News, from

Spring 1994. Once operational, it will be the largest regional news service in the US, and it will hire 100 additional staff to provide regional news coverage. ("Satnews")

KRON TV in San Francisco is also creating a cable-only regional news channel. When the new Cable Consumer Protection Act forced cable operators to negotiate for the rebroadcast of over-the-air channels, KRON demanded that cable operators carry the new news channel as a condition.

Other cable operators have been compelled to carry NBC's new cable channel America's Talkiing, a spinoff off CNBC, which will offer talk shows and informational programming. ("San Francisco Chronicle")

KGAY--KGAY, the audio service for gay and lesbian listeners, has left satellitetelevision. They were behind in paying their uplink bill and the uplinker pulled them on September 14th. It is not know if they will try another attempt at launching again to continue their service. ("Satnews") KGAY broadcast from Denver on Galaxy 3, transponder 22, 7.46 MHz. ("Satellite TV Week")

DMX--International Cablecasting Technologies Inc. has signed a USD 20 million contract with Spar Communications Group for the supply of digital audio receivers that will receive ICT's 120 channel Digital Music Express (DMX) service by DBS satellite.

DMX initially started with a 30 channel offering, but the company is in the middle of an aggressive service and geographical expansion programme. With the new receivers, customers can tune into 120 20Khz CD-quality music channels at the touch of a button.

The new offering will be initially restricted to the North American marketplace, and it will enable the company to expand its business music offering, DMX for Business, which provides commercial-free, DJ-free music to stores, offices and factories.

A 75cm antenna will be used to receive broadcasts throughout the USA and North America from the SBS-5 satellite. Each receiver is fully addressable, enabling special broadcasts to be sent to subscribers. There is also the capability to offer generic corporate programming broadcasts on under-utilised channels, switching in receivers as required. ("Satnews")

MBC--When the London-based Middle East Broadcasting Centre bought the UPI news agency there were reports the Arabic language channel would expand its broadcasts from the Middle East and Europe into North America. Instead, MBC is buying into an existing channel.

MBC has signed an agreement with the Arab Network of America, the dominant Arabic language network of the US, to exchange news and programming. ANA broadcasts its programming by satellite from
studios in Washington, and broadcasts are relayed on many cable television systems throughout North America. A nationwide Arabic radio service is also provided by ANA, and distributed over satellite for local terrestrial redistribution. ("Satnews") ANA broadcasts on the Satcom 2R satellite,

transponder 1.

SHORTWAVE AND LOCAL MEDIA NEWS:

AFGHANISTAN--The Radio Afghanistan external service has been heard on 4775 kHz with the following schedule: 14:00 Urdu, 14:30 English, 15:00 Russian, 15:30 hrs Arabic. (BBC Monitoring)

AZERBAIJAN--The external service of Radio Dada Gorgud broadcasts in Arabic at 15:00-17:00 hrs on 6175 kHz, in Persian and Turkish at 13:00-14:00 hrs on medium wave (1476 kHz?), and in English at 17:00-18:00 hrs on 15240 kHz. New services were added in January in Talysh (spoken in southern Azerbaijan), Kurdish, and Armenian on 1476. 4957, and 15240 kHz.

French and German broadcasts are due to begin in mid-October, each 15 minutes long. (Radio Dada Gorgud via BBC Monitoring)

CAMBODIA--Radio UNTAC, the Cambodian voice of the United Nations, ended its broadcasts on September 23rd, after 13 months on the air. (BBC Monitoring)

RUSSIA--During the recent siege of the Russian parliament, a very low-powered radio station calling itself Radio Parliament was heard on around 580 kHz.

A group of Russian television journalists say that they are planning to launch their own independent channel. Evegenii Kisselev said on the Ostankio TV weekly political programme Itogi that the channel called Segondnya (Today) would begin in October, using journalists from the Ostankio and Russia-state television broadcasting companies. Many journalists are leaving the state-owned company because of alleged interference by political paymasters. ("Satnews")

The independent TV station NTV ("Nezavisimoye Televideniye" - "Independent Television") was scheduled to go into operation on channel 5 in St. Petersburg on October 10th. It apparently will be owned by the "Most" group. (BBC Monitoring)

Russian president Boris Yeltsin has been set a letter by the directors of the transfer of the fourth state-run channel to the "Most commercial company". Ostankino is concerned that the creation of
independent superstations will actually restrict viewer choice instead of expanding it. ("Satnews")

SOMALIA--The pro-Aydid Radio Mogadishu, the Voice of the Great Somali People, reappeared on September 22nd on 6870 kHz. It suffered from continuous interference on the channel, which took the form of a pulsating white-noise signal apparently transmitted without carrier but centered on 6870 kHz. On September 27th the pro-Aydid station moved to 6877 kHz, where it was free of interference. (BBC Monitoring)

Sweden Calling DXers is the world's oldest radio program for shortwave listeners. Radio Sweden has presented this round-up of radio news, features,

and interviews on Tuesdays since 1948.

Radio Sweden broadcasts in English:

To Europe:

17:15 hrs on 1179 and 6065 kHz
18:30 hrs and 21:30 hrs on 1179, 6065, and 9655 kHz
22:30 hrs on 1179 and 6065 kHz
23:30 hrs on 1179 kHz

To East Africa and the Middle East:

18:30 hrs on 15145 kHz

To Asia and the Pacific:

12:30 hrs on 15240, 17740, and 17865 kHz
23:30 hrs on 11910 kHz
01:30 hrs on 9695 and 11695 kHz

To North America:

13:30 and 14:30 hrs on 15240 and 17870 kHz
02:30 and 03:30 hrs on 9695 and 11650 kHz

To Latin America:

00:30 hrs on 9695 and 11650 kHz

The broadcasts at 17:15, 18:30, 21:30 (weekends only), and 22:30 hrs are relayed on satellite on Astra transponder 26 (Sky Movies Gold) audio 7.74 MHz and Tele-X on 12.207 GHz (TV4) audio 7.38 MHz.

Contributions can be sent to DX Editor George Wood by fax to +468-667-6283, from Internet, MCI Mail or CompuServe (to the CompuServe mailbox 70247,3516), through the FidoNet system to 2:201/697 or to SM0IIN at the packet radio BBS SM0ETV.

Reports can also be sent to:

Radio Sweden
S-105 10 Stockholm
Sweden

Contributions should be NEWS about electronic media--from shortwave to satellites--and not loggings of information already available from sources such as the "World Radio TV Handbook". Clubs and DX publications may reprint material as long as MediaScan/Sweden Calling DXers and the original contributor are acknowledged, with the exception of items from BBC Monitoring, which are copyright.

We welcome comments and suggestions about the electronic edition, Sweden Calling DXers, and our programs in general.

Thanks to this week's contributors Good Listening!

642. HAM-server index file

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-17 04:30:25 UTC
From: HAMSinfo@GRAFex.sbay.org
Message-ID: <gate.750832225@GRAFex.sbay.org>
Source record: 51277
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc

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Executed: Sun Oct 17 00:30:20 1993

Directory: /hamradio/

00-INDEX.TXT 10277 10-16-93
TEMPDATE 38 10-17-93
TEMP 0 10-17-93

Directory: /hamradio/10meters/

10MBEACO.LST 6233 3-26-93

Directory: /hamradio/advanced/

ADV21.ZIP 103501 6-18-93
ADVANCED.FRQ 1275 8-15-91

Directory: /hamradio/antennas/

ANTENNAS.BAS 2227 3-26-93
ANTENNAS.TXT 7771 2-02-93
BUTERNUT.TXT 6106 3-26-93
CRPT2NTA.TXT 10713 2-02-93
DISCONE.TXT 1805 3-26-93
LOADPOLE.ZIP 7542 3-01-93
MININEC3.ZOO 164929 3-01-93
MOBILE.TXT 4458 3-26-93
PORTABLE.ANT 1735 5-26-93
YAGIMAX.ZIP 352305 3-01-93

Directory: /hamradio/arrl/

ARRLBBS.TXT 3153 3-03-93
ARRLDIGI.TXT 23303 2-02-93
ARRLINDX.TXT 17591 3-02-93
ARRLINFO.TXT 3321 2-02-93
ARRLJOB.TXT 18455 2-02-93
ARRLLOGO.PS 2911 2-02-93
ARRLPIO.TXT 116131 2-02-93
QSLBURO1.TXT 14440 2-02-93
QSLBURO2.TXT 10117 2-02-93

Directory: /hamradio/bandplan/

BANDPLAN.DOC 2528 3-24-92
PLAN129.TXT 1928 8-12-91
PLAN222.TXT 585 12-22-91
```

PLAN2M.TXT 522 8-12-91
PLAN440.TXT 572 8-12-91
PLAN6M.TXT 249 8-12-91
PLAN900.TXT 1108 8-12-91

Directory: /hamradio/callbook/

CALBK-WP.TXT 4064 8-17-92
CALLBOOK.C 18991 3-26-93
CLBK-ARY.TXT 1592 12-28-90
CLBK-EYH.TXT 1480 3-07-93
CLBK-INT.TXT 2280 3-06-93
CLBK-IYA.TXT 556 11-23-91

Directory: /hamradio/code/

AUTOCW.ARC 60849 3-01-93
CODETEST.HIN 7287 3-26-93
CW.ARC 62536 3-01-93
CW104.ZIP 83367 3-01-93
FFTMORSE.ZIP 27344 3-01-93
HAMCOM21.ZIP 182531 3-01-93
MACHINE.ARC 13061 3-01-93
MOR21.ZIP 53013 6-18-93
MORSE.BAS 5661 3-01-93
MORSE30B.ZIP 71113 3-01-93
MORSETST.BAS 7179 3-01-93
PROCW.ZIP 24227 3-01-93
ROBOCOPY.ZIP 27346 3-01-93
SM316.ZIP 109484 3-01-93
SUPERIOR.INF 1033 7-26-93
SUPERIOR.SHR 92208 3-19-93

Directory: /hamradio/contests/

CONTEST.ARC 25065 3-01-93
CONTEST.ZIP 147989 3-01-93
CT626.ZIP 178372 3-01-93
UNIGRID2.BAS 12341 3-26-93
WHATSON.ARC 15826 3-01-93
WLOGDEMO.ZIP 163276 3-01-93
WRTLOG60.ZIP 836615 6-08-93

Directory: /hamradio/

00-INDEX.TXT 10277 10-16-93
TEMPDATE 38 10-17-93
TEMP 0 10-17-93

Directory: /hamradio/dx/

AUTOLOG4.ARC 165621 3-01-93
DXB20DMO.ZIP 129658 3-01-93

DXCC104.ARC 120117 3-01-93
DXCCK2DI.TXT 15904 2-02-93
DXLOCATE.LST 35911 3-26-93
DXLOG185.ZIP 171738 3-01-93
HAM_LOG.ZIP 94848 3-19-93
HFPROP.BAS 12300 3-26-93
LOGBOOK.ARC 104668 3-01-93
LOGBOOK.ZIP 83422 3-19-93

Directory: /hamradio/exams/

AUTOEXAM.ZIP 251630 3-01-93
EXAMCRDT.TXT 6490 2-02-93
EXAM_OPS.TXT 7431 2-02-93
HAMQUIZ.ZIP 101015 3-19-93
HAMSTACK.TXT 3439 2-02-93
HANDICAP.TXT 9632 2-02-93
VEFC24.ARC 26774 3-01-93

Directory: /hamradio/extra/

EXT21.ZIP 99672 6-18-93
EXTRA.FRQ 1157 8-25-91

Directory: /hamradio/general/

GEN012.ZOO 24160 6-18-93
GEN21.EXE 83879 3-19-93
GEN21.ZIP 72931 6-18-93
GENTEST.EXE 136865 1-11-92

Directory: /hamradio/help/

BCUMAHAM.TXT 5156 3-28-93
BITFTP.HLP 11347 5-09-93
ELMER100.ZIP 65425 3-01-93
ELMERS.DIR 46722 3-07-93
ELMRINFO.TXT 6984 2-02-93
ELMRLIST.TXT 46722 3-07-93
FAQ_HAM1.TXT 20412 2-02-93
FAQ_HAM2.TXT 33497 2-02-93
FAQ_HAM3.TXT 86169 3-07-93

Directory: /hamradio/hf/

COMB6.ZIP 43190 3-01-93
GC103.ARC 23776 3-01-93
MICROMUF.BAS 4881 3-01-93
MICROMUF.PAS 7695 3-01-93
SOL_GEO.DAT 24836 2-02-93
SOL_TERA.TXT 27028 2-02-93

Directory: /hamradio/internet/

FTPSITES.TXT 3480 6-06-93
GATEWAYS.TXT 5785 2-02-93
HAMEMAIL.TXT 223537 2-02-93
NEWSGRPS.TXT 6917 2-02-93
RECINFO.TXT 9252 3-14-93
USNETSEL.TXT 8164 2-02-93

Directory: /hamradio/macstuff/

ADVANCED.SIT 133986 4-11-93
EXTRA.SIT 128944 4-11-93
FREQVALE.HQX 112932 8-17-93
GENERAL.SIT 97148 4-11-93
MAC525_1.HQX 89968 8-17-93
MAC535.HQX 122083 8-17-93
MCMORSIT.HQX 44983 7-14-93
MORSE.MAC 263 3-02-91
NOVICE.SIT 121453 4-11-93
SAVANTDM.HQX 178005 8-17-93
SAVNTUPD.HQX 80757 8-17-93
SOFTKISS.HQX 145274 8-17-93
SOURCE93.06 23768 6-20-93
TECH.SIT 107031 4-11-93
SOFTWARE.MAC 24267 10-13-93

Directory: /hamradio/misc/

9PN-25PN.TXT 676 3-27-93
AUTOLOG.ZIP 109886 3-19-93
BATTRIES.TXT 9694 2-02-93
BBS_LIST.TXT 41800 2-28-93
BEACONS.INF 2284 7-29-92
CA-PHONE.BBS 1338 11-06-92
CHART.C 1999 3-26-93
CONDOR.INF 2870 9-26-92
CONDORMP.TXT 3486 7-16-89
EASYLOGR.ZIP 228482 3-19-93
FCC-PRB1.TXT 25754 4-05-93
FLNTALAW.TXT 3528 2-02-93
HAMPLTES.TXT 5507 2-02-93
HAM_READ.ARC 1366 3-19-93
K1EA-619.EXE 315212 3-19-93
K2UYH.ARC 108510 3-19-93
LOGOS.PS 9258 2-02-93
MAILORDR.TXT 20383 2-02-93
MAP.ZIP 802214 3-19-93
MARS.FRQ 987 8-28-93
NICADS.INF 6533 3-26-93
PRO-2004.MOD 4418 3-26-93
PRO-2004.REV 18797 3-26-93
QSLCARD1.PS 27337 3-26-93
QSLCARD2.PS 6399 3-26-93

RFI.TXT 1991 3-17-93
RFI001.TXT 2158 6-08-89
RFI002.TXT 1815 6-08-89
RFI003.TXT 3288 6-08-89
RFI_TIPS.TXT 5948 2-02-93
SCANNER.MOD 5287 3-26-93
SMITHCHA.PS 23664 3-26-93
UC-U2AT.REV 7239 3-26-93
VHFPROP.BAS 24498 3-26-93

Directory: /hamradio/mods/

2ETO2AT.MOD 1443 8-07-93
56KBFIX.MOD 1093 5-26-93
741AMODS.ZIP 8974 5-26-93
760XLT.MOD 490 5-26-93
ALLBAND.MOD 2870 5-26-93
ALR22T.MOD 2152 5-26-93
BC205XLT.MOD 4221 5-26-93
DJ-580 155310 5-26-93
DJ500.MOD 2885 5-26-93
DR510.MOD 4186 5-26-93
FRQSGALR.ZIP 206290 5-26-93
FT-530.MOD 2302 8-07-93
FT101E.MOD 2639 5-26-93
FT209RH.MOD 1034 5-26-93
FT212RH.MOD 1345 5-26-93
FT23R.MOD 776 5-26-93
FT411.MOD 4824 5-26-93
FT411-2.MOD 1026 5-26-93
FT470-2.MOD 9942 5-26-93
FT470-3.MOD 1951 5-26-93
FT4700.MOD 1195 5-26-93
FT727CAT.MOD 2520 5-26-93
FT727R.MOD 1071 5-26-93
FT747GX.MOD 1221 5-26-93
FT767GX.MOD 1452 5-26-93
HT-24-T.MOD 3581 7-24-93
IC-24.MOD 2071 5-26-93
IC-MU2.MOD 1186 5-26-93
IC02.MOD 2082 5-26-93
IC02-2.MOD 1231 5-26-93
IC02-3.MOD 861 5-26-93
IC04.MOD 1897 5-26-93
IC24-2.MOD 993 5-26-93
IC24-3.MOD 5387 5-26-93
IC2410.MOD 4437 5-26-93
IC28.MOD 479 5-26-93
IC2SAT.MOD 4994 5-26-93
IC2SAT-2.MOD 8131 5-26-93
IC32.MOD 2501 5-26-93

IC32-2.MOD 2719 5-26-93
IC3200A.MOD 452 5-26-93
IC37.MOD 3900 5-26-93
IC735IBM.MOD 1407 5-26-93
IC900.MOD 2945 5-26-93
ICOM32AT.MOD 1937 5-26-93
ICOM735.1 3614 5-26-93
ICOM735.2 1380 5-26-93
ICOM735- 3614 5-26-93
ICW2A.MOD 13392 5-26-93
KAMDCD.MOD 2048 5-26-93
KENWD930.MOD 6640 5-26-93
NOAASTNS.ZIP 20995 5-26-93
PK232LOK.MOD 1858 5-26-93
PORTABLE.ANT 1735 5-26-93
PRO2004.MOD 5157 5-26-93
PRO2005.MOD 2602 5-26-93
PRO2006.MOD 3119 5-26-93
PRO2020.MOD 4775 5-26-93
PRO34.MOD 1239 5-26-93
R7000.MOD 3404 5-26-93
R7000-2.MOD 26880 5-26-93
RADIO.MOD 4915 5-26-93
RDIOMODS.SRV 956 5-26-93
TC2DUPLX.MOD 1581 5-26-93
TH-215A.MOD 2174 3-26-93
TH215 2072 5-26-93
TH215.MOD 2227 5-26-93
TH225.MOD 2932 5-26-93
TH25.MOD 7811 5-26-93
TH27A 6725 5-26-93
TH28A 2608 5-26-93
TH75.MOD 1385 5-26-93
TINY2TNC.MOD 1431 5-26-93
TM-721A.MOD 4867 3-26-93
TM-741-M 17526 5-26-93
TM2570A.MOD 778 5-26-93
TM321A.MOD 600 5-26-93
TM321A-2.MOD 957 5-26-93
TM321A-3.MOD 1415 5-26-93
TM421A.MOD 1836 5-26-93
TM701.MOD 2979 5-26-93
TM701A.MOD 280 5-26-93
TM721.MOD 4228 5-26-93
TM721-2.MOD 2784 5-26-93
TM721-3.MOD 6073 5-26-93
TM721A 13389 5-26-93
TM731.MOD 1612 5-26-93
TM741.MOD 1230 5-26-93
TM941A-2.MOD 2723 5-26-93

TNC2.MOD 1589 5-26-93
TNC2A.MOD 3329 5-26-93
TS-930S.MOD 2226 3-26-93
TS140.MOD 563 5-26-93
TS430.MOD 825 5-26-93
TS430-2.MOD 844 5-26-93
TS430MOD.DOC 2719 3-26-93
TS430S.REV 5066 3-26-93
TS440.MOD 1589 5-26-93
TS440-AT.MOD 971 5-26-93
TS440S.INT 9986 3-26-93
TS680.MOD 514 5-26-93
TS680-2.MOD 2940 5-26-93
TS711.MOD 123 5-26-93
TS790A.MOD 5059 5-26-93
TS850-1.MOD 12088 5-26-93
TS850-2.MOD 9086 5-26-93
TS930.MOD 6931 5-26-93
TS940IBM.MOD 2539 5-26-93
U2AT.MOD 3161 5-26-93
UNI2510.MOD 1622 5-26-93

Directory: /hamradio/newfiles/

AMPR.ORG 409718 7-06-93
FRQSGALR.ZIP 206290 5-26-93
NOAASTNS.ZIP 20995 5-26-93
NTEX_MS.ARC 118873 3-19-93
PCECAP.ZIP 100174 3-19-93
TEC20.ZIP 88796 3-19-93
TEC21.EXE 95783 3-19-93
TRAVINFO.LST 38204 3-26-93
TUNEUP.TNC 2557 7-03-91
UC-U2AT.REV 7239 3-26-93
WIRETAP.TXT 32215 3-26-93
NETMAC52.SIT 178633 9-29-93
NETMAC55.SIT 179770 9-29-93
NET_AMIG.ARC 108322 9-29-93
NET_BM.ARC 37772 9-29-93
NET_DES.ARC 26249 9-29-93
NET_DOC.ARC 143194 9-29-93
NET_EW.ARC 115955 9-29-93
NET_MAC.HQX 223461 9-29-93
NET_READ.ME 2443 9-29-93
NETAMSRC.ARC 56320 9-29-93

Directory: /hamradio/novice/

NOV21.EXE 106365 3-19-93
NOVICE25.ARC 50049 3-01-93
NOV_TEST.ZIP 95588 3-01-93

Directory: /hamradio/nts/

3RDPARTY.LST 1802 9-09-91
CANADA.ADR 375 2-14-90
COUNTRY.ADR 2975 11-25-91
NTS12.ZIP 93145 6-18-93
NTSDISK.EXE 37401 11-20-91
RGRAM27.ZIP 48027 3-19-93
ZIPCODE.EXE 214180 2-22-93

Directory: /hamradio/packet/

AMTORFRQ.TXT 9158 10-13-93
9600BAUD.PKT 8154 3-06-91
A802MANP.TXT 35627 8-10-93
ARYGATE.TXT 10286 4-11-93
AX25SPEC.TXT 66235 3-30-93
BBSTIP01.TXT 1435 1-04-91
BBSTIP02.TXT 1868 1-04-91
BBSTIP03.TXT 1869 1-04-91
BBSTIP04.TXT 2032 1-04-91
BBSTIP05.TXT 2196 1-04-91
BBSTIP06.TXT 1132 1-04-91
BBSTIP07.TXT 1180 1-04-91
BBSTIP08.TXT 863 1-04-91
BBSTIP09.TXT 2260 1-04-91
BBSTIP10.TXT 1325 1-04-91
BBSTIP11.TXT 1755 1-04-91
BBSTIP12.TXT 2222 1-04-91
BBSTIP13.TXT 2305 1-04-91
CATEGORY.LST 3477 1-26-92
CHEAPPKT.TXT 4258 3-30-93
FAQ.TXT 33570 3-08-93
FAQ_PAKT.TXT 29942 2-02-93
HFHINTS.TXT 3020 4-05-90
HI-SPEED.NET 15864 8-07-93
HIERADR.DOC 4849 6-15-90
INFOPAKT.TXT 39574 2-02-93
KAM401.ARC 156061 3-01-93
NEXTGEN.BBS 3948 3-21-93
PKTINFO1.TXT 2891 2-20-93
PKTINFO2.TXT 6338 2-02-93
ROUTING.TXT 28069 3-26-93
RTTY12G.ARC 126651 3-01-93
SETTINGS.TNC 1089 7-03-91
TTY37.ARC 36600 3-01-93
WP.DOC 1507 5-09-93
XPCOM131.ZIP 403741 5-29-93
HFBBS.TXT 19833 10-13-93

Directory: /hamradio/packet/loz/

00-INDEX.TXT 2446 4-19-93
PACKET01.LOZ 3746 3-03-93
PACKET02.LOZ 9436 3-04-93
PACKET03.LOZ 6675 3-07-93
PACKET04.LOZ 7372 3-10-93
PACKET05.LOZ 6155 3-17-93
PACKET06.LOZ 15037 3-23-93
PACKET07.LOZ 5707 5-11-92
PACKET08.LOZ 6715 5-12-92
PACKET09.LOZ 4578 5-12-92
PACKET10.LOZ 8698 1-31-93
PACKET11.LOZ 6493 1-31-93
PACKET12.LOZ 5881 5-13-92
PACKET13.LOZ 6285 5-29-92
PACKET14.LOZ 7157 5-13-92
PACKET15.LOZ 4714 5-14-92
PACKET16.LOZ 3396 5-14-92
PACKET17.LOZ 4683 5-14-92
PACKET18.LOZ 2168 5-14-92
PACKET19.LOZ 4902 5-15-92
PACKET20.LOZ 7564 5-15-92
PKTINF01.TXT 4109 7-22-91
PKTINF02.TXT 6580 7-28-91
PKTINF03.TXT 4555 8-06-91
PKTINF04.TXT 3806 8-12-91
PKTINF05.TXT 4484 8-21-91
PKTINF06.TXT 4192 9-03-91
PKTINF07.TXT 4885 9-09-91
PKTINF08.TXT 4676 9-17-91
PKTINF09.TXT 3938 10-01-91
PKTINF10.TXT 2786 10-28-91
PKTINF11.TXT 3412 11-12-91
PKTINF12.TXT 7717 11-26-91
PKTINF13.TXT 2480 12-17-91
PKTINF14.TXT 2499 1-06-92
PKTINF15.TXT 2975 1-06-92
PKTINF16.TXT 1646 1-14-92

Directory: /hamradio/packet/software/

APL700.EXE 412928 8-26-93
FE.ZIP 16626 7-14-93
GP.DOC 125349 7-24-93
GP-1X50.ZIP 370518 7-06-93
LANDC159.EXE 153301 3-19-93
LANLK159.EXE 192812 3-19-93
PAX285.ZIP 15395 7-14-93
PCT214.ZIP 378739 3-01-93
PKGOL624.ZIP 323067 3-26-93
PKTSFTWR.TXT 4185 2-02-93
RTTY12G.ARC 126651 3-01-93
SELCAL11.ZIP 12590 3-01-93

TTY37.ARC 36600 3-01-93
XPCOM131.ZIP 403741 5-17-93

Directory: /hamradio/packet/software/aa4re/

AA4REBBS.INF 2654 4-11-93
AA4REBBS.ZIP 357277 3-19-93
B21TANSI.ZIP 3620 5-26-93
BB21HC.ZIP 259837 5-26-93
BB21HL.ZIP 110380 5-26-93
BB21HN.ZIP 358648 5-26-93
BB21HP.ZIP 239199 5-26-93
DOC211.ZIP 99644 5-26-93
HH21H.INF 1377 5-26-93
MBB35SRC.ZIP 72475 5-26-93
MBBIOS35.ZIP 29299 5-26-93
MBBIOS38.ZIP 39704 5-26-93
WATCHDOG.ZIP 8425 5-26-93

Directory: /hamradio/packet/software/dsp/

DOC.ZIP 301000 9-02-93
DSP105.ZIP 46817 9-02-93
DSP4SCHE.ZIP 238499 9-02-93
DSPTIPUP.ZIP 21417 9-02-93
SOURCE.ZIP 671625 9-02-93

Directory: /hamradio/packet/software/g8bpq/

BPQ405E.ZIP 143360 5-26-93
BPQ406.ZIP 170880 5-26-93
BPQ406A.ZIP 20216 5-26-93
BPQ406E.ZIP 181926 5-26-93
RSWD0330.ZIP 66213 5-26-93
RZSW30.ZIP 97411 5-26-93
TFPCX.ZIP 34817 5-26-93

Directory: /hamradio/packet/software/thebox/

BOOTARC.EXE 243874 7-19-93
INSTALL.BAT 174 7-19-93
NOS_1229.EXE 203295 7-06-93
NOS_1229.LP 172009 7-06-93
NOS_1229.MAN 221639 7-06-93
NOS_1229.MAP 75531 7-06-93
NOS_1229.NR 168281 7-06-93
NOS_1229.VER 52 7-06-93
SOURCARC.EXE 131999 7-19-93
SYSARC.EXE 105377 7-19-93
SYSOP15.ENG 65121 7-19-93
UPDATE.BAT 1354 7-19-93

Directory: /hamradio/packet/software/thenet/

THENET.FLA 6498 7-19-93
THENET.INF 4005 7-19-93
THENET.PAR 3692 7-19-93
TNET-X1G.TXT 68 7-19-93
TNET-X1G.ZIP 119680 7-19-93
TNET-X1H.ZIP 123904 7-19-93

Directory: /hamradio/packet/software/f6fbb/

FBB515.ZIP 991152 7-30-93
TPK181.ZIP 579533 7-30-93

Directory: /hamradio/packet/software/wa7mbl/

OIZ-UTIL.ARC 64062 7-30-93
REQDIR.ARC 34438 7-30-93

Directory: /hamradio/packet/software/wa8ded/

TNCDED.DOC 29130 7-30-93
TNCDED.HEX 45068 7-30-93
TNCDED.MSG 4116 7-30-93
WA8DED 1004 7-30-93
WA8DED.DOC 14790 7-30-93
WA8DED.ROM 19284 7-30-93

Directory: /hamradio/packet/tcpip/

00-INDEX.TXT 1602 6-08-93
AMPR.ORG 409718 7-06-93
AMPRHOST 303457 7-06-93
AMPRINFO.TXT 5603 2-02-93
AMPRXORG.REV 516969 7-06-93
ASMOBJ.MSG 607 6-08-93
ASMOBJ.ZIP 6766 6-08-93
BMEXE332.ZIP 30898 6-08-93
BMSRC_ST.ARC 25334 8-07-93
CONNEX.Z 12030 7-06-93
E920603.ZIP 189423 6-08-93
EXPIRY.ZIP 53196 6-08-93
HELP_V02.ZIP 11984 7-06-93
INTRONOS.ZIP 54272 7-06-93
MAN-9106.ZIP 57169 6-08-93
NAN24HYC.ZIP 42635 6-08-93
NOS-SLFP.ZIP 310211 6-08-93
NOSVIEW.ZIP 1764 7-06-93
NOSVW304.ZIP 682322 7-06-93
PCNET.EXE 227498 4-26-92
PKTDRVR.INF 157 6-08-93
ROSE-NOS.ZIP 18050 7-06-93
S920603.ZIP 656302 6-08-93
SATTRACK.ZIP 34886 7-06-93
SLFP123.ZIP 30476 6-08-93
TCPIP.INF 5818 6-02-93

VIEW9206.ZIP 384591 6-08-93

Directory: /hamradio/packet/tcpip/bm/

BM.DOC 16641 9-02-93
BM332C.TXT 235 9-02-93
BM332C.ZIP 52889 9-02-93
BMEXE.ARC 38547 9-02-93
BMH02.TXT 790 9-02-93
BMH02EXE.ZIP 300305 9-02-93
BMH02SRC.ZIP 60096 9-02-93
BMUTIL.ZIP 11546 9-02-93
VIEW0207.ZIP 320436 9-02-93

Directory: /hamradio/packet/tcpip/docs/

BEGIN.DOC 110255 2-07-91
FAQ-1292 75121 7-06-93
INTRONOS.ZIP 54272 7-06-93
KA9QBGN.ZIP 190366 6-08-93
KA9QNOS.NR 141577 7-06-93
KA9QNOS.PS 133704 7-06-93
NETNIX.PS 286542 7-06-93
NOSBGNLP.ZIP 57488 7-06-93
NOSBGNPS.ZIP 137021 7-06-93
RSPF22P.TXT 85164 7-06-93
TAPR92.TXT 72334 7-06-93
TAPR9600.MOD 11209 7-06-93
TDMA.TXT 12713 7-06-93
USERMAN.ZIP 112344 7-06-93

Directory: /hamradio/packet/tcpip/g1emm/

G1EMMKIT.EXE 168079 7-06-93
G1EMMKIT.ZIP 213973 7-06-93
KH113016.EXE 193643 7-06-93
KH113016.ZIP 593938 7-06-93
PCELM21.ZIP 116682 7-06-93
READ.ME 1077 7-06-93
SMALLEMM.EXE 134945 7-06-93

Directory: /hamradio/packet/tcpip/gpsnos/

GPSC1DOC.ZIP 38361 7-30-93
GPSC1EXE.ZIP 162104 7-30-93
GPSC1HLP.ZIP 13415 7-30-93
GPSC1SRC.ZIP 638737 7-30-93

Directory: /hamradio/packet/tcpip/gracilus/

GCALLBK.TXT 440 7-06-93
GCALLBK.ZIP 13914 7-06-93
GRAC20M2.ZIP 539910 7-06-93

P10DVR.TXT 824 7-06-93
P10DVR.ZIP 25230 7-06-93
P10R30E.TXT 29184 7-06-93
P10R30E.ZIP 291851 7-06-93
TWINDV21.ZIP 38656 7-06-93

Directory: /hamradio/packet/tcpip/pa0gri/

GR-BUGS.BEE 5120 7-06-93
GR-NOTES.BEE 19584 7-06-93
GRIBEE08.ZIP 831616 7-06-93
GRNOS08.ZIP 268800 7-06-93
GRNOS08S.ZIP 257408 7-06-93
NOS_1229.DOC 172009 7-06-93
NOS_1229.EXE 203295 7-06-93
NOS_1229.MAN 221639 7-06-93
NOS_1229.MAP 75531 7-06-93
NOS_1229.ROF 168281 7-06-93
NOS_1229.VER 52 7-06-93
NOS_1229.ZIP 821866 7-06-93
RSPF0826.TXT 294 7-06-93
RSPF0826.ZIP 53695 7-06-93

Directory: /hamradio/packet/tcpip/pe1chl/

920420.DIR 6353 7-06-93
920420LT.ARC 175565 7-06-93
920420MT.ARC 111710 7-06-93
920420TC.ARC 153934 7-06-93
920420TP.ARC 104054 7-06-93
920420TS.ARC 113244 7-06-93
AUTOEXEC.DRS 2321 7-06-93
HISTORY.ARC 48620 7-06-93
NETDOC1.ARC 16485 7-06-93
NETDOC2.ARC 44672 7-06-93
PACSAT.ARC 87474 7-06-93
PB920430.ZIP 131138 7-06-93
PE1CHL.NET 417 7-06-93
README.CHL 384 7-06-93
SCCPRIN5.ARC 159020 7-06-93

Directory: /hamradio/packet/tcpip/wg7j/

JNOS107B.EXE 283045 7-06-93
JNOS107B.ZIP 987123 7-06-93
WG7JDOC.ZIP 46266 7-06-93

Directory: /hamradio/rigs/

COMPICOM.TXT 15707 3-26-93
FRGLOD10.ZIP 14451 4-01-93
HF_RIGS.TXT 4317 2-02-93
HT_INFO.TXT 10990 2-02-93

IC-12AT.REV 6682 3-26-93
IC-32AT.MOD 2715 3-26-93
IC02A.MOD 2424 3-26-93
IC02ATR.MOD 3294 3-26-93
IC28H.REV 6855 3-26-93
ICOM.C 9232 3-14-93
ICOM-110.C 9842 3-26-93
ICOMCI-V.CMD 7443 3-26-93
INFOEQPT.TXT 10063 2-02-93
KENWD930.MOD 6640 3-26-93
MNUFCTRS.TXT 5051 2-02-93
QST_REVW.TXT 41097 2-02-93
R7000.HIN 26430 3-26-93

Directory: /hamradio/satelite/

DOVE3W13.ZIP 43150 3-01-93
ELETRANS.C 2176 3-26-93
GEOSAT20.ZIP 56405 3-01-93
HAM_SAT.TXT 10967 2-02-93
ORBIT23.ARC 36852 3-01-93
PROTOCOL.1 39022 6-19-89
PROTOCOL.2 2157 6-19-89
QUICKS24.ZIP 77120 3-01-93
SATELITE.BAS 5642 3-01-93
SATELITE.HOW 18571 3-26-93
SATTAIM.ARC 1860 3-01-93
SATTRACK.INF 5017 3-26-93
TRAK280.ZIP 346847 3-01-93
USAT92B2.ZIP 86782 3-01-93
WU120EXE.ZIP 222368 3-01-93

Directory: /hamradio/satelite/arsene/

ARSENE.TXT 1968 7-19-93
TELEM14G.ZIP 29363 7-19-93
TELEM14H.ZIP 29447 7-19-93
TELEMENG.ZIP 39938 7-19-93
TELEMFRA.ZIP 40680 7-19-93

Directory: /hamradio/sstvfax/

AUTOFAX.ARC 12452 3-01-93
FFT.COM 52096 2-02-93
FFTH.COM 53760 2-02-93
JVFAX50.ZIP 407934 3-01-93
SSTVFAX2.ZIP 28323 3-01-93
SSTVWFAX.TXT 37309 2-02-93
WEFAX.ARC 35968 3-01-93
WXRDR22.ARC 98944 3-01-93

Directory: /hamradio/swl/

FAQ_SWL.TXT 21936 2-02-93
SWL114.ZIP 302908 3-01-93
SWL_INFO.TXT 20666 2-02-93

Directory: /hamradio/technici/

TEC22.ZIP 74516 6-18-93
TECHTEST.EXE 148542 1-11-92

Directory: /hamradio/utility/

ARJ230NG.EXE 200704 6-18-93
ARJ241A.EXE 223856 8-07-93
BINHEX.HQX 89586 8-17-93
BOOZ.ZIP 12639 6-18-93
COMP16.ZIP 16102 6-18-93
COMP430D.ZIP 20241 6-18-93
FILTER11.ARC 55936 3-01-93
INTMOD60.ARC 11902 3-01-93
JLEM.ZIP 14846 2-02-93
OHMSLAW.ARC 22197 3-01-93
PDZIP.ZIP 63473 6-18-93
PKUNZIP.EXE 23528 3-15-90
PKUNZIP2.EXE 28806 5-17-93
QEXTRACT.ZIP 43123 6-18-93
RC85PR15.ZIP 50983 3-01-93
RFTOOLS.ARC 144799 3-01-93
UNARJ230.ZIP 39074 6-18-93
UNZIP.EXE 26838 6-18-93
UNZIP41.ARC 121470 6-18-93
UNZIP41.EXE 21933 6-18-93
UUDECODE.BAS 5709 3-28-93
UUDECODE.C 5565 3-28-93
UUDECODE.DOC 519 3-28-93
UUEXE521.ZIP 32455 8-24-93
WHERITIS.ARC 30943 3-01-93
ZIP.EXE 59260 6-18-93
ZIP10EX.ZIP 158335 6-18-93
ZOO210.EXE 55721 6-18-93

Directory: /hamradio/vlf/

1750MTR.TXT 6532 2-02-93

643. Message not deliverable

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-17 08:18:20 UTC
From: Administrator_at_ICA-HQ@ica.ica.COM
Message-ID: <9309177508.AA750845900@ica.ica.com>
Source record: 51276

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Ham-Digital Digest Sat, 16 Oct 93 Volume 93 : Issue 74

Today's Topics:
Guide to the Personal Radio Newsgroups
Has anyone put a "login: " on the air? (XENIX) (2 msgs)
Help for beginner
Multiple TNCs on same frequency (2 msgs)
Packet Standards
re: Public Apology
Z-80B CPU and SIO/0 Source?

Send Replies or notes for publication to: <Ham-Digital@UCSD.Edu>
Send subscription requests to: <Ham-Digital-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Digital Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-digital".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.
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Date: Fri, 15 Oct 1993 11:03:54 GMT
From: nevada.edu!news.unomaha.edu!news@uunet.uu.net
Subject: Guide to the Personal Radio Newsgroups
To: ham-digital@ucsd.edu

Posted-By: auto-faq 2.4
Archive-name: radio/personal-intro
Revision: 1.5 09/18/93 16:49:31
Changes: new mailing lists, .packet rmgroup, and .policy updates

(Note: The following is reprinted with the permission of the author.)

This message describes the rec.radio.amateur.*, rec.radio.cb, rec.radio.info,
and rec.radio.swap newsgroups. It is intended to serve as a guide for the new
reader on what to find where. Questions and comments may be directed to the
author, Jay Maynard, K5ZC, by Internet electronic mail at
jmaynard@oac.hsc.uth.tmc.edu. This message was last changed on 18 September
1993 to add the mailing lists for the new rec.radio.amateur newsgroups, to
note the rmgroup of rec.radio.amateur.packet, and to officially retire some
(in)famous threads of discussion on rec.radio.amateur.policy.

History
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Way back when, before there was a Usenet, the Internet hosted a mailing list for hams, called (appropriately enough) INFO-HAMS. Ham radio discussions were held on the mailing list, and sent to the mailboxes of those who had signed up for it. When the Usenet software was created, and net news as we now know it was developed, a newsgroup was created for hams: net.ham-radio. The mailing list and the newsgroup were gatewayed together, eventually.

As the net grew, and as packet radio came into vogue, packet discussion began to dominate other topics in the group and on the list. This resulted in the logical solution: a group was created to hold the packet discussion, and another corresponding mailing list was created as well: net.ham-radio.packet and PACKET-RADIO, respectively.

These two groups served for several years, and went through Usenet's Great Renaming essentially unchanged, moving from net.ham-radio[.packet] to rec.ham-radio[.packet]. Readership and volume grew with the rest of the network.

The INFO-HAMS mailing list was originally run from a US Army computer at White Sands Missile Range, SIMTEL20. There were few problems with this arrangement, but one was that the system was not supposed to be used for commercial purposes. Since one of hams' favorite pastimes is swapping gear, it was natural for hams to post messages about equipment for sale to INFO-HAMS/rec.ham-radio. This ran afoul of SIMTEL20's no-commercial-use restriction, and after some argument, a group was created specifically for messages like that: rec.ham-radio.swap. This group wasn't gatewayed to a mailing list, thus avoiding problems.

While all this was happening, other folks wanted to discuss other aspects of the world of radio than the personal communications services. Those folks created the rec.radio.shortwave and rec.radio.noncomm newsgroups, and established the precedent of the rec.radio.* hierarchy, which in turn reflected Usenet's overall trend toward a hierarchical name structure.

The debate between proponents of a no-code ham radio license and its opponents grew fierce and voluminous in late 1989 and 1990. Eventually, both sides grew weary of the debate, and those who had not been involved even more so. A proposal for a newsgroup dedicated to licensing issues failed. A later proposal was made for a group that would cover the many recurring legal issues discussions. During discussion of the latter proposal, it became clear that it would be desirable to fit the ham radio groups under the rec.radio.* hierarchy. A full-blown reorganization was passed by Usenet voters in January 1991, leading to the overall structure we now use.

After the reorganization, more and more regular information postings began to appear, and were spread out across the various groups in rec.radio.*. Taking the successful example of the news.answers group, where informational postings from across the net are sent, the group rec.radio.info was created in December, 1992, with Mark Salyzyn, VE6MGS, initially serving as moderator.

In January, 1993, many users started complaining about the volume in rec.radio.amateur.misc. This led to a discussion about a second reorganization, which sparked the creation of a mailing list by Ian Kluft,

KD6EUI. This list, which was eventually joined by many of the most prolific posters to the ham radio groups, came up with a proposal to add 11 groups to the rec.radio.amateur hierarchy in April 1993. The subsequent vote, held in May and early June, approved the creation of five groups: rec.radio.amateur.digital.misc (to replace .packet), .equipment, .homebrew, .antenna, and .space.

The Current Groups

I can hear you asking, "OK, so this is all neat history, but what does it have to do with me now?" The answer is that the history of each group has a direct bearing on what the group is used for, and what's considered appropriate where.

The easy one is rec.radio.amateur.misc. It is what rec.ham-radio was renamed to during the reorganization. Any message that's not more appropriate in one of the other groups belongs here, from contesting to DX to ragchewing on VHF to information on becoming a ham.

The group rec.radio.amateur.digital.misc is for discussions related to (surprise!) digital amateur radio. This doesn't have to be the common two-meter AX.25 variety of packet radio, either; some of the most knowledgeable folks in radio digital communications can be found here, and anything in the general area is welcome. The name was changed to emphasize this, and to encourage discussion not only of other text-based digital modes, such as AMTOR, RTTY, and Clover, but things like digital voice and video as well. The former group, rec.radio.amateur.packet, should be removed by September 21st, 1993. It is obsolete, and you should use .digital.misc instead (or the appropriate new mailing list, mentioned below). The group has .misc as part of the name to allow further specialization if the users wish it, such as .digital.tcp-ip.

The swap group is now rec.radio.swap. This recognizes a fact that became evident shortly after the original group was formed: Hams don't just swap ham radio gear, and other folks besides hams swap ham equipment. If you have radio equipment, or test gear, or computer stuff that hams would be interested in, here's the place. Equipment wanted postings belong here too. Discussions about the equipment generally don't; if you wish to discuss a particular posting with the buyer, email is a much better way to do it, and the other groups, especially .equipment and .homebrew, are the place for public discussions. There is now a regular posting with information on how to go about buying and selling items in rec.radio.swap; please refer to it before you post there.

The first reorganization added two groups to the list, one of which is rec.radio.amateur.policy. This group was created as a place for all the discussions that seem to drag on interminably about the many rules, regulations, legalities, and policies that surround amateur radio, both existing and proposed. Recent changes to the Amateur Radio Rules (FCC Part 97) have finally laid to rest the Great Usenet Pizza Autopatch Debate as well as complaints about now-preempted local scanner laws hostile to amateurs, but plenty of discussion about what a bunch of rotten no-goodniks

the local frequency coordinating body is, as well as the neverending no-code debate, may still be found here.

The other added group is rec.radio.cb. This is the place for all discussion about the Citizens' Band radio service. Such discussions have been very inflammatory in rec.ham-radio in the past; please do not cross-post to both rec.radio.cb and rec.radio.amateur.* unless the topic is genuinely of interest to both hams and CBers - and very few topics are.

The rec.radio.info group is just what its name implies: it's the place where informational messages from across rec.radio.* may be found, regardless of where else they're posted. As of this writing, information posted to the group includes Cary Oler's daily solar progagation bulletins, ARRL bulletins, the Frequently Asked Questions files for the various groups, and radio modification instructions. This group is moderated, so you cannot post to it directly; if you try, even if your message is crossposted to one of the other groups, your message will be mailed to the moderator, who is currently Mark Salyzyn, VE6MGS. The email address for submissions to the group is rec-radio-info@ve6mgs.ampr.ab.ca. Inquires and other administrivia should be directed to rec-radio-request@ve6mgs.ampr.ab.ca. For more information about rec.radio.info, consult the introduction and posting guidelines that are regularly posted to that newsgroup.

The groups rec.radio.amateur.antenna, .equipment, .homebrew, and .space are for more specialized areas of ham radio: discussions about antennas, commercially-made equipment, homebrewing, and amateur radio space operations. The .equipment group is not the place for buying or selling equipment; that's what rec.radio.swap is for. Similarly, the .space group is specifically about amateur radio in space, such as the OSCAR program and SAREX, the Shuttle Amateur Radio EXperiment; other groups cover other aspects of satellites and space. Homebrewing isn't about making your own alcoholic beverages at home (that's rec.crafts.brewing), but rather construction of radio and electronic equipment by the amateur experimenter.

Except for rec.radio.swap and rec.radio.cb, all of these newsgroups are available by Internet electronic mail in digest format; send a mail message containing "help" on a line by itself to listserv@ucsd.edu for instructions on how to use the mail server.

All of the groups can be posted to by electronic mail, though, by using a gateway at the University of Texas at Austin. To post a message this way, change the name of the group you wish to post to by replacing all of the '.'s with '-'s - for example, rec.radio.swap becomes rec-radio-swap - and send to that name@cs.utexas.edu (rec-radio-swap@cs.utexas.edu, for example). You may crosspost by including multiple addresses as Cc: entries (but see below). This gateway's continued availability is at the pleasure of the admins at UT-Austin, and is subject to going away at any time - and especially if forgeries and other net.abuses become a problem. You have been warned.

A Few Words on Crossposting
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Please do not crosspost messages to two or more groups unless there is genuine interest in both groups in the topic being discussed, and when you do, please include a header line of the form "Followup-To: group.name" in your article's headers (before the first blank line). This will cause followups to your article to go to the group listed in the Followup-To: line. If you wish to have replies to go to you by email, rather than be posted, use the word "poster" instead of the name of a group. Such a line appears in the headers of this article.

One of the few examples of productive cross-posting is with the rec.radio.info newsgroup. To provide a filtered presentation of information articles, while still maintaining visibility in their home newsgroups, the moderator strongly encourages cross-posting. All information articles should be submitted to the rec.radio.info moderator so that he may simultaneously cross-post your information to the appropriate newsgroups. Most newsreaders will only present the article once, and network bandwidth is conserved since only one article is propagated. If you make regular informational postings, and have made arrangements with the moderator to post directly to the group, please cross-post as appropriate.

--
Jay Maynard, EMT-P, K5ZC, PP-ASEL | Never ascribe to malice that which can
jmaynard@oac.hsc.uth.tmc.edu | adequately be explained by stupidity.
"If my car ran OS/2, it'd be there by now" -- bumper sticker
GCS d++ p+ c++ l+ m+/- s/++ g++ w++ t+ r

--
73, Paul W. Schleck, KD3FU

pschleck@unomaha.edu

Celebrating 60 years of the Univ. of Maryland ARA - W3EAX (1933-1993)

Date: 14 Oct 1993 23:04:37 GMT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!math.ohio-state.edu!sdd
.hp.com!hpscit.sc.hp.com!icon.rose.hp.com!hpchase.rose.hp.com!cmoore@network.ucsd.edu
Subject: Has anyone put a "login:" on the air? (XENIX)
To: ham-digital@ucsd.edu

Larry Kollar (lkollar@nyx.cs.du.edu) wrote:

: .... The eventual
: goal is to get a MUD on-line. :-)

I've considered doing this as well. In asking around a bit I got a suggestion from someone who has one running. He suggested having a cheap PC running NOS and acting as a router between Packet and your Xenix box. Have the MUD run on the Xenix box in its normal mode, it talks TCP/IP to the cheap PC, which then routes the connections to packet.

Of course, this does require a second dedicated machine doing the routing.

Note also that I've not actually done this, but it sounded like a good idea
to me.

Chris Moore
N6IYS
cmoore@mothra.rose.hp.com

Date: Fri, 15 Oct 1993 20:34:43 GMT
From: swrinde!cs.utexas.edu!uwm.edu!spool.mu.edu!nigel.msen.com!well!moon!pixar!pixar.com!
bruce@network.ucsd.edu
Subject: Has anyone put a "login: " on the air? (XENIX)
To: ham-digital@ucsd.edu

I'm running Linux (free Unix) and WAMPES (a Unix port of KA9Q).
If you telnet or connect to it, WAMPES logs you into Linux.
It can handle multiple connections. If there's no login for your callsign, it
creates one. By editing the password file or the user's startup script, you
can arrange for particular users to go directly to the BBS or another program
instead of to Linux.

I've only had it up for a few days, and it's not going to be very useful until
I set up an antenna outdoors, but it works fine. Linux will be moving AX.25
into the kernel shortly.

You can get WAMPES from ucsd.edu:/hamradio/packet/wampes, there may be a
more recent version in ucsd.edu:/hamradio/packet/incoming. If you are
interested in Linux, start reading the comp.os.linux newsgroups.

Bruce Perens KN6TX/AE (Formerly KD6OTD/AE, soon AC6??) Bruce@Pixar.com510-215-3502

Date: 15 Oct 93 06:11:12 GMT
From: pacbell.com!iggy.GW.Vitalink.COM!wetware!spunky.RedBrick.COM!psinntp!psinntp!newstan
d.syr.edu!mothra.syr.edu!fchee@ames.arpa
Subject: Help for beginner
To: ham-digital@ucsd.edu

Hello. I am beginning to explore packet radio technology and after
following this newsgroup I still have a few questions. I am most
interested in connecting to internet and would like to know if
it's possible to be able to connect to machines such as with
telnet with nothing more than radio equipment. I have information
on 56kbit connections in an HF band without a license. This
doesn't seem accurate, but I'd like to know if such a thing
is possible and what type of equipment would be required. I'd
also be interested to know if packet or digital radio operation
can be performed somehow without FCC rules/regs. All I know for
sure so far is that unless your rich you can only expect to
connect to PR BBSs, chat and get weather info at 1200 baud
under FCC rules. I do better than that with a phone/modem.

Date: 14 Oct 93 19:45:36 GMT
From: scifi!hawnews.watson.ibm.com!news@uunet.uu.net
Subject: Multiple TNCs on same frequency
To: ham-digital@ucsd.edu

In <1993Oct13.170548.5219@combdyn.com>, lawrence@combdyn.com (Lawrence *The Dreamer* Chen) writes:
>I'm running NOS, and I like it a lot. Now I've been asked about putting up
>a fuller Packet BBS.
>
>Since I can't see anyway for the two packages to share the same TNC and radio,
>I was wondering if running two TNCs, two Radios, and two Antennas would work..
>with both on the same frequency....or could two TNCs be wired to the same
>radio?

What other BBS are you going to run and how? Are you going to use seperate systems or run both programs on the same system? If your going to use the same box, you could run BPQ and let it control the TNC and radio. Most BBSes and NOS will talk to a BPQ switch instead of their own TNCs so you have NOS and the BBS talk to BPQ and let it handle the radio and TNC.

If your going to use two systems, you could run BPQ and the BBS on one and cable up the NOS system using a null modem cable and let it talk to the bbs via the BPQ switch. I think that will work.

>Having NOS and the BBS talk to each other over the air would probably be out
>of the question, aside from the fact that when one is talking the other is
>deaf (desensed).
Correct. The BQP switch will let them talk internally.

73's de Jack - kf5mg
AX25net - kf5mg@kf5mg.#dfw.tx.usa.na - (817) 962-4409
Internet - kf5mg@kf5mg.ampr.org - 44.28.0.14
Worknet - kf5mg@vnet.ibm.com

Date: 15 Oct 93 21:15:01 GMT
From: news.cerf.net!pagesat!olivea!spool.mu.edu!howland.reston.ans.net!pipex!uknet!acorn!agodwin@network.ucsd.edu
Subject: Multiple TNCs on same frequency
To: ham-digital@ucsd.edu

In article <750648057snx@llondel.demon.co.uk> dave@llondel.demon.co.uk writes:
>
>It is quite possible to run NOS and an AX25 packet BBS on the same machine.
>If you run the BPQ network switch on the PC and run Desqview, you can get
>NOS to coexist quite happily in a Desqview window with BBS software in other
>windows. I have successfully run RLI/YFB/FBB software alongside various
>versions of NOS in this way.
>

It works, but performance may be disappointing - my local IP switch runs
this way, and even though the BBS is used only to serve IP users with
a more complete system than NOS's native BBS provides (the AX25 users are
served by a different station), performance can be abysmal.

As an example, I got a 17 second initial ping (i.e. including the arp)
time last night. No packets lost, but incredibly slow response.
I suspect this is because the BPQ switch buffers up the packets OK, but
they aren't processed by the other software until desqview chooses to
switch tasks. If a short timeslice is used, poor efficiency results.
If a long timeslice is used, latency is long.
I imagine deskview has no way of adjusting the time given to the various
tasks dynamically, since it can't know what they're waiting for.

You may get away with this for a BBS system that provides IP access,
and it may be possible to tune the system for better throughput,
but I wouldn't recommend it if you're doing IP routing.

-adrian

Date: 15 Oct 1993 23:23:25 GMT
From: nothing.ucsd.edu!brian@network.ucsd.edu
Subject: Packet Standards
To: ham-digital@ucsd.edu

There's been an ARFC (Amateur RFC) directory on UCSD for several years,
created when this subject last came up. So far there's nothing in it
because no one has written any yet.
- Brian

Date: 14 Oct 93 07:27:41 GMT
From: ogicse!emory!dragon!nj8j!ben@network.ucsd.edu
Subject: re: Public Apology
To: ham-digital@ucsd.edu

sfarlow@NeoSoft.com (Stephen Farlow) writes:

> AGAIN, amateur radio is a HOBBY and is VOLUNTEER. As such, anyone wh
> CHOOSES to run a PBBS has full rights to control what leaves his PBBS
> or gets posted there.That goofy lawyer and the guy who hired him ought
> to apologize to that SYSOP for their behavior.

Actually, he has. There was a followup apology from the original complainer
posted to packet not long ago.

Ben

+--------------------------------------+---------------------------------+
Ben Coleman NJ8J	"All that is not eternal is
AX.25: NJ8J@W4QO.#EAL.#ATL.GA.USA.NA	eternally out of date."
Internet: ben@nj8j.atl.ga.us	C. S. Lewis

+--+

Date: Thu, 14 Oct 1993 11:37:15 GMT
From: news.service.uci.edu!paris.ics.uci.edu!csulb.edu!library.ucla.edu!europa.eng.gtefsd.com!howland.reston.ans.net!torn!nott!uotcsi2!revcan!rubicon!uuisis!ve3ppe!znha@network.ucsd.edu
Subject: Z-80B CPU and SIO/0 Source?
To: ham-digital@ucsd.edu

In article <750312143snx@llondel.demon.co.uk>, dave@llondel.demon.co.uk wrote:
>In article <F3k8ac1w165w@lakes.trenton.sc.us> jcox@lakes.trenton.sc.us (John Cox) writes:
>>
>>I'm in the process of upgrading an MFJ-1274 TNC to run TheNet X1J. In
>>order to switch to the higher speed clock (4.9 MHz), I understand that I
>>need to install a "B" series (6Mhz) Z-80 CPU and SIO/0 chip. I have
>> [trimmed]
>If you have 'A' versions, try those at the higher speed... you may well
>find that they work. If you are putting the TNC on a remote site then get
> [trimmed]

I've got TheNet X1H running (J is in a prom, getting ready) on a stock
1270. As Dave suggested, they can work nicely. Recommend trying it,
as it can save bucks.

The only "gotcha" I've heard of, is an inability to properly reset
after a power cycle. To verify this, I provoked the tnc prior to
installation, and sure enough, could get it to stall on POR even with
standard (supplied) crystal and processor/sio. A gell-cell now
forstalls that. Otherwise, it's a nice piece of work!

73, Gord.

Date: Fri, 15 Oct 1993 03:23:54 GMT
From: mdisea!jackb@uunet.uu.net
To: ham-digital@ucsd.edu

References <EMERY.93Oct1091359@bert.cs.byu.edu>, <8092.2cbc32b0@hayes.com>,
<1993Oct14.122651.2146@ke4zv.atl.ga.us>
Subject : Re: MacTCP radio driver?

Hi to Gary, Bill and all my friends in Georgia...

In article <1993Oct14.122651.2146@ke4zv.atl.ga.us> gary@ke4zv.UUCP (Gary Coffman) writes:
>In article <8092.2cbc32b0@hayes.com> bcoleman@hayes.com (Bill Coleman) writes:
>>
>>Gary, I don't know if are addressing the question as asked. Do you actually
>>know of someone who has the appropriate driver (I think they are called LDEVs)
>>for MacTCP and has tried this? Did they run into "packet storm" problems?
>
>The only person I know who has written software to directly generate

>AX25 on the Mac is Jack Brindle. But I don't think he's found a way
>to interface it directly to the Mac TCP/IP. Last I heard, he was
>still using a clone PC in the closet to deal with the packet storm
>problem.

Gary, you know better than that. While still in Atlanta I used a Mac 512K digital board with KA9Q/MAC code to provide a gateway function between my local AppleTalk network and the 56K rf network. It worked wonderfully (Alas there is no 56K network in Seattle, YET). The PC (an old 8 MHz "turbo" XT) was used to play with things like Minix and other things. I still have the machine, but haven't turned it on in quite a while. It does provide me with a pretty good eprom programmer from time to time, however.

>The fundamental issue is the setting of the TCP timers. In commercial
>TCP offerings designed for high speed local LANs using ethernet or
>Appletalk, these timers are set much too short and generate a storm
>of TCP resends before the first AX25 level packet has a chance to be
>sent and an acknowledge packet *for TCP* received. So this issue is
>at a higher level than the driver code. Most TCP timers are adaptive,
>and after the first storm they will back off sufficiently. But avoiding
>that initial storm requires setting the initial value of the TCP timers
>*much* longer than normal for ethernet. And those timers aren't user
>settable as far as I know.

In MacTCP they are not _user_ settable, but they are program settable. Unfortunately this does not provide a good solution since you would have to modify each application to handle things. There is good news, however. The problem has been recognized, and the commercial folks are wanting to move tcp information over low speed (up to 19.2KB) rf links. This has already caused some tcp stack implementations to be modified to use adaptive algorithms. Apple, in fact, has stated that MacTCP 3.0 will be fully adaptive. They also claim a 1994 release for MacTCP 3.0. Given their networking folk's recent track record, I tend to believe the date. By the way, MacTCP's current big timing problem comes from the retry timing becoming too large quickly. This causes large delays even when the link is very lightly loaded. The pending 2.0.3 release should go a long ways to fixing this.

>It seems possible that a *kludge* that violates layering could be
>added to the AX25 driver to discard TCP resends that are premature
>for the channel in use. But that would require maintaining a considerable
>amount of *state* in the driver code to implement the kludge. That's
>generally a Bad Thing(tm), and also a performance issue. The clean
>solution is to allow resetting the TCP timers on an interface basis.
>But that requires mucking about with the commercial code. Someone
>from Apple might comment on whether there's a way to do this with the
>existing code.

I wonder how much of a kludge this might be. I really shudder at the thought of the link layer interpreting tcp layer information, but there might be some way of "helping out" the timer negotiations. It's something that more than we hams are currently interested in ;-).

--
==
Jack Brindle
ham radio: wa4fib
internet: jackb@mdd.comm.mot.com

Date: Fri, 15 Oct 1993 18:55:06 GMT
From: world!dts@uunet.uu.net
To: ham-digital@ucsd.edu

References <F3k8ac1w165w@lakes.trenton.sc.us>, <750312143snx@llondel.demon.co.uk>,
<CEvxM4.332@ve3ppe.isis.org>
Subject : Re: Z-80B CPU and SIO/0 Source?

A company called ACP (1-800-FONE-ACP) sells the Z80 chips the original poster
is looking for. They have both the 8 MHZ CPU and the matching SIO/0, and
they are in CMOS.

In addition to using parts that are proper for the speed you are running,
the CMOS will cut down on power consumption, which is a real concern
for sites running on solar or emergency backup power...

--

Daniel Senie Internet: dts@world.std.com
Daniel Senie Consulting n1jeb@world.std.com
508-365-5352 Compuserve: 74176,1347

End of Ham-Digital Digest V93 #74
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644. Re: JNOS 1.07b not on 73 BBS

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-17 12:35:10 UTC
From: jsloman@BIX.com
Message-ID: <jsloman.750861310@BIX.com>
Source record: 51278

Burt, I have recieved hundreds of email messages
concerning the column and yet less than 10% requested
help in locating the software. As I said in the
column, a _little_ ingenuity on the part of the reader
would be all that was needed to locate JNOS--most
readers seemed to find this true.

Version 1.07b of JNOS is NOW on the 73 BBS, however
anyone with ftp access should get it from:

ucsd.edu

in the:

hamradio/packet/tcpip/WG7J directory

As for your advice on seeking out a local expert, I
agree wholeheartedly. This is ALWAYS a good idea.

Burt, I don't know what is bugging you but believe me,
I am not paid lavishly to write for 73, nor is it my
"job". The amount of time it takes to answer email
from readers has grown exponentially, and this lead to
a choice between getting the software posted to the
73 BBS and answering mail. Since I was getting NO mail
indictaing that people were looking for it there, I
chose to deal with email, and still could not answer it
all.

For anyone interested in learning to install, configure and
manage amateur TCP/IP under JNOS, the series of columns will
continue. Thanks to the overwhelming majority of you, who,
unlike Burt, directed your frustration at the problem instead
of me or the staff at 73.

--Jeff

645. KAM and Yaesu or Alinco

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-17 16:28:28 UTC
From: dalpert@merle.acns.nwu.edu
Message-ID: <dalpert-171093102829@elvex32.acns.nwu.edu>
Source record: 51279

Does anyone have the cables configurations for connecting the KAM to a
Yaesu 757gx and to an Alinco 1200 data radio. Would appreciate any help.
Thanks. Please reply here for others and also by email.

--

____

| Dave Alpert, KB9CNU | Packet Radio:
| 440 No. Western Ave. | KB9CNU@W8LVN.IL.US.NOAM
| Lake Forest, IL | Direct packet through ILWIN(145.57)
| 708-295-6078 (voice) | CI$: 70416,124
| 708-295-6926 (MACropoedia BBS) | America Online: Dalpert
| 708-295-1927 (FAX) | GEnie: DAlpert
| MS-DOS, Just Say NO! |
|_____________________________________| Friends don't let friends do DOS!

646. Re: Macintosh & Packet: Need HELP!

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-17 20:37:16 UTC
From: Jeffrey Luszcz <jrl2@cornell.edu>
Message-ID: <29sadsINN3jg@newsstand.cit.cornell.edu>
Source record: 51282

Hello Rog,
I run a packet station with my Mac. I have a KPC-3 TNC =$110 mail
order plus I'm using COMET which is a public domain terminal emulation
program. I tell COMET to look at my printer port for my TNC (which
it believes to be a regular modem) and away I go. I use a Radio Shack
HTX-202 handheld as my radio with a mag mount sometimes and other
times a quad which I made for $10.
Hope this helps.
-Jeff Luszcz N2TIQ
jrl2@cornell.edu

647. Message not deliverable

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-17 23:48:19 UTC
From: Administrator_at_ICA-HQ@ica.ica.COM
Message-ID: <9309177509.AA750901699@ica.ica.com>
Source record: 51284

Ham-Digital Digest Sun, 17 Oct 93 Volume 93 : Issue 76

Today's Topics:
JNOS 1.07b not on 73 BBS
Looking for VHF packet equipment recommendations
Model 102 as baycom modem tnc??
Public Apology
RAC Bulletins in Electronic Form?
TPK<==>FBB protocol/packets?
WX FAX with PK232?

Send Replies or notes for publication to: <Ham-Digital@UCSD.Edu>
Send subscription requests to: <Ham-Digital-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Digital Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-digital".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 14 Oct 93 17:18:00 GMT
From: ogicse!uwm.edu!cs.utexas.edu!oakhill!val!afarm!fredmail@network.ucsd.edu
Subject: JNOS 1.07b not on 73 BBS
To: ham-digital@ucsd.edu

With only a 2-3 month lead time available to locate and upload
a version of JNOS (ANY version) 73 Magazine has failed yet
again. Those of you hoping to get the same version of the
JNOS code that Jeffrey Sloman N1EWO is going to use in his
series of articles, are apparently SOL (Short On Luck).
As someone noted last month, the 1.08c version was not
on the 73 BBS. This month, the article (with no explanation
for the change) informed readers that JNOS 1.07b would be
used and was available on the 73 BBS, in the Packet area (#9).
The Packet area is area 8; there still does not appear to be
ANY version of JNOS from the 73 BBS.

IF you have INTERNET access, you may get 1.07b from ucsd.edu.
73 magazine says the directory is \hamradio\packet\tcpip\jnos.
Since ucsd.edu is a UNIX system, I'd guess that the backslashes
(the \) should be slashes (the /), unless someone has got a
neat piece of code running. If the \ character doesn't work,
try the /. Better yet, find a local expert to help with

getting TCP/IP going.

Burt N5SYY

.. "Do something special for Mother's Day" - Oedipus
___ Blue Wave/QWK v2.12

Date: Sun, 17 Oct 1993 01:38:46 GMT
From: library.ucla.edu!europa.eng.gtefsd.com!howland.reston.ans.net!vixen.cso.uiu
c.edu!moe.ksu.ksu.edu!hobbes.physics.uiowa.edu!news.uiowa.edu!herky.cs.uiowa.edu!
mau@network.ucsd.edu
Subject: Looking for VHF packet equipment recommendations
To: ham-digital@ucsd.edu

Hi
I just got my technician license and I am trying to collect info for packet
radio equipment while I am waiting for the magic paper to arrive.

Since I have no idea about VHF equipment I bought a few magazines and I
read the FAQ. Well I think that I have some idea of what I am looking for
but if you think that I am looking for the wrong setup please tell me so.
I am interested in a portable VHF packet station which I could operate
with out AC power.

THe setup I am thinking of is the following.
1) a handhelp VHF radio that I can also use for voice communications
2) A battery or battery/AC operated TNC. I am only interested in VHF packet
so I need a TNC which has the minimum number of operating modes and features.
3) VHF active antenna. I need an active antenna because I found that there is
too much interference where I live.
I show some ads for a MFJ or MJF?? active antenna which
operates up to 200 Mhz and can be used for HF as well, so I can use with my
Sony sw receiver.
3) A laptop or handheld msdos computer. I would prefer to use my Tandy 100
but I do not know if I can find software for it.

SO I am looking for recommendation for the following equipment
1) VHF handheld radios price up to $300
2) VHF TNCs price up to $150
3) active antennas price up to $100

You may e-mail me any comments or you can post to this group.

Napoleon
mau@herky.cs.uiowa.edu

--

Napoleon Mau
mau@herky.cs.uiowa.edu

Date: Fri, 15 Oct 1993 22:42:55 -0400
From: magnesium.club.cc.cmu.edu!news.sei.cmu.edu!bb3.andrew.cmu.edu!andrew.cmu.ed
u!ee2g+@uunet.uu.net
Subject: Model 102 as baycom modem tnc??
To: ham-digital@ucsd.edu

Has anyone hooked a baycom serial port modem up to a TRS-80 modem
102 laptop computer? If so where can I find the 'soft tnc' software?

Thanks
Chuck N3QAT
ee2g+Charles@andrew.cmu.edu

Date: Thu, 14 Oct 93 16:17:54 -0400
From: dog.ee.lbl.gov!agate!howland.reston.ans.net!europa.eng.gtefsd.com!emory!dra
gon!nj8j!ben@network.ucsd.edu
Subject: Public Apology
To: ham-digital@ucsd.edu

eeyimkn@unicorn.nott.ac.uk (M. Knell) writes:

> In article <4653@eram.esi.COM.AU> dave@esi.COM.AU (Dave Horsfall) writes:
> >So, who is this prawn, "Randy KF8TV @ W8HHF" ? Some wanna-be lawyer?
> >Are there any more like him over there?
> >
> Anybody feel like mailstorming him? But then again, maybe it's just not worth
> loading the pacsats and HF gateways just for this bozo's sake..

Evidently, he's already been mailstormed enough. He's posted an apology to
the packet network, and has even taken a self-imposed month away from packet
as a result of his original posting. Methinks he's seen the light.

Ben

+-------------------------------------+---------------------------------+
Ben Coleman NJ8J	"All that is not eternal is
AX.25: NJ8J@W4QO.#EAL.#ATL.GA.USA.NA	eternally out of date."
Internet: ben@nj8j.atl.ga.us	C. S. Lewis
+---+

Date: Sat, 16 Oct 1993 13:02:21 GMT
From: gumby!destroyer!nntp.cs.ubc.ca!alberta!adec23!ve6mgs!mark@yale.arpa
Subject: RAC Bulletins in Electronic Form?
To: ham-digital@ucsd.edu

I am breaking from tradition, and allowing MY request for information to
be cross-posted to rec.radio.info. Since it is an administrivia request
for the group of rec.radio.info, I feel it is justified as part of running
the information only news group.

I have had a rash of recent requests for some electronic access to the
Radio Amateurs of Canada (RAC) Bulletins and Articles. I will be endeavoring
to find a local source, if possible, but would also appreciate any effort
by someone else to be a provider of this information to the rec.radio.info
news group. Please contact rec-radio-request@ve6mgs.ampr.ab.ca if you have
access!

Thanks, Ciao, 73 de VE6MGS/Mark mark@ve6mgs.ampr.ab.ca|mark@adec23.UUCP
- Entries to the Amateurs on USENET List: hams-on-usenet@ve6mgs.ampr.ab.ca
- Postings to rec.radio.info: rec-radio-info@ve6mgs.ampr.ab.ca
- rec.radio.info administrivia: rec-radio-request@ve6mgs.ampr.ab.ca
"Give any one species too much rope, and they'll **** it up"
`Too much Rope' Amused to Death, Roger Waters

Date: 15 Oct 93 17:48:45 GMT
From: library.ucla.edu!news.mic.ucla.edu!magnesium.club.cc.cmu.edu!pitt.edu!dsinc
!spool.mu.edu!uwm.edu!rpi!utcsri!utgpu!attcan!ncrcan!coutts!wwg@network.ucsd.edu
Subject: TPK<==>FBB protocol/packets?
To: ham-digital@ucsd.edu

I don't have a normal TNC (HAPN), so I'm attempting to write my own
software to emulate some of the TPK processes, while connected (and not)
to a FBB bbs. Grabbing the broadcasted bulletin headers is a sinch.
Getting uploads/downloads due to compression, is NOT.

After TPK transmits the "F< 113905\r" message to the bbs (while connected
to retrieve message # 113905) some data followed by the compressed
message is transmitted. While the dumps of actual traffic I have at
home show all the gory details... I'm trying to submit this message
from memory... From memory, what appears to be transmitted is:

01 <length_byte> subject info 00

This is followed by:

02 <data_segment_length> ...appears to be 4? fixed bytes of info...
+ the rest of the first data segment. A full segment appears to
never exceed the limit of 250 for length.

then more

02 <length_byte> ....data...

packets follow until the entire message is delivered to TPK. The length
bytes never include the "02" byte nor the length byte itself.

NOW TO THE POINT OF THIS POSTING:
================================

1. Can anyone expound on the exact "data units" and formats
here?

2. Where in the first "data segment" does the compressed
message actually start? It appears bytes 0-1 (my recall?)

are uncompressed size + 66 bytes (little endian). Bytes
2-3 (I think) were always "00 00" in my dumps. So does
the compressed message start at byte offset 4, or is there
a 66 byte frequency table/other header/or what?, prior to
the compressed message? Most messages all start with
nearly identical byte sequences for up to 15+ bytes. It
almost suggests a frequency table...

3. WHAT COMPRESSION METHOD IS USED? Is it LZW (ie if no
frequency table is used)? Maybe one of the PKZIP
employed methods? Maybe the same one used internally by
7PLUS.EXE? Anybody know what method 7PLUS.EXE uses?

Anybody wanna suggest some good tests for identifying the compression
method used?

If there is enuf interest, I could upload some of my captured
TPK <==> FBB bbs traffic dumps. With enuf net readers jumping on
the "problem", I'm sure we can crack this open.

Maybe, there actually exists some documentation on this topic?

Warren W. Gay VE3WWG John Coutts Library Services Limited
wwg@coutts.UUCP Niagara Falls, Ontario, Canada

Date: 15 Oct 1993 13:07:43 -0700
From: dog.ee.lbl.gov!agate!howland.reston.ans.net!vixen.cso.uiuc.edu!newsrelay.ia
state.edu!destroyer!nntp.cs.ubc.ca!vanbc.wimsey.com!vanbc.wimsey.com!not-for-mail
@network.ucsd.edu
Subject: WX FAX with PK232?
To: ham-digital@ucsd.edu

The fax capabilities of the PK-232 are rather limited. It is not mentioned
in the documentation for the hardware, but the AEA software documentation
mentions that the PK-232 drops two of every three lines of a WEFAX. That
renders the received faxes almost unreadable.

Of course, I bought the AEA software before I found out about this!

The AEA-FAX is much better. I have even received satellite images on 9.090
MHz that were absolutely clear.

So, don't bother with the AEA software for the PK-232MBX. In my opinion, it
is not worth the price.

73 de VE7MDL (VE0MDL@VE7KIT on packet) ....Erik.

Date: Sat, 16 Oct 1993 11:57:50 +0000
From: library.ucla.edu!agate!doc.ic.ac.uk!uknet!demon!llondel.demon.co.uk!dave@ne
twork.ucsd.edu

To: ham-digital@ucsd.edu

References <1993Oct13.170548.5219@combdyn.com>, <750648057snx@llondel.demon.co.uk
>, <27259@acorn.co.uk>
Reply-To : dave@llondel.demon.co.uk
Subject : Re: Multiple TNCs on same frequency

In article <27259@acorn.co.uk> agodwin@acorn.co.uk (Adrian Godwin) writes:
>In article <750648057snx@llondel.demon.co.uk> dave@llondel.demon.co.uk writes:
>>
>>It is quite possible to run NOS and an AX25 packet BBS on the same machine.
>>If you run the BPQ network switch on the PC and run Desqview, you can get
>>NOS to coexist quite happily in a Desqview window with BBS software in other
>>windows. I have successfully run RLI/YFB/FBB software alongside various
>>versions of NOS in this way.
>>
>
>It works, but performance may be disappointing - my local IP switch runs
>this way, and even though the BBS is used only to serve IP users with
>a more complete system than NOS's native BBS provides (the AX25 users are
>served by a different station), performance can be abysmal.
>
>As an example, I got a 17 second initial ping (i.e. including the arp)
>time last night. No packets lost, but incredibly slow response.
>I suspect this is because the BPQ switch buffers up the packets OK, but
>they aren't processed by the other software until desqview chooses to
>switch tasks. If a short timeslice is used, poor efficiency results.
>If a long timeslice is used, latency is long.
>I imagine deskview has no way of adjusting the time given to the various
>tasks dynamically, since it can't know what they're waiting for.
>
The system here currently runs FBB5.15/WNOS4.0b/BPQ4.06k under DV2.42. I can
get pings of <4 secs on a fairly busy link freq. AFAIK all the bits of s/w are
DV-aware and will give up timeslices when waiting. Try running the BPQ IP
router in another DV window to handle most of the routeing, and only direct
the minimum stuff to the NOS window.

>You may get away with this for a BBS system that provides IP access,
>and it may be possible to tune the system for better throughput,
>but I wouldn't recommend it if you're doing IP routing.
>
My system happens to be the main IP router for the local area........

Last comment is that it runs a six-port switch on a 33MHz 386DX. Your mileage
may vary.

Dave
--

****
* G4WRW @ GB7WRW.#41.GBR.EU AX25 * Start at the beginning. Go on *
* dave@llondel.demon.co.uk Internet * until the end. Then stop. *

```
* g4wrw@g4wrw.ampr.org Amprnet * (the king to the white rabbit) *
************************************************************************

------------------------------

End of Ham-Digital Digest V93 #76
******************************
```

648. Macintosh & Packet: Need HELP!

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-18 09:45:57 UTC
From: fsrla@aurora.alaska.edu
Message-ID: <1993Oct18.014557.1@aurora.alaska.edu>
Source record: 51287

I must say a HUGE thank-you
to everyone who helped out with my questions!
Your answers were quite informing!!!!!!
Thanks you!!!!!!
ROG!

649. AmigaNOS development

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-18 13:30:46 UTC
From: roman@tix.timeplex.COM
Message-ID: <9310181330.AA01177@tix.timeplex.com>
Source record: 51289

Is there anyone out there in net land currently working on updates to AmigaNOS? If so I'd be interested in trying out the fruits of your labors. AmigaNOS seems to be lagging pretty far behind NOS for MSDOS (still POP2 for example) and the version I have 2.9k has it's share of bugs.

--

Dan Roman Internet: roman@tix.timeplex.com (prefered address) //
ccMail: roman_d@timeplex.com GEnie: D.ROMAN1@genie.geis.com \X/ Only AMIGA!

650. Heath TU and tuning unit for sale.

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-18 13:43:39 UTC
From: lee@tosspot.sv.com
Message-ID: <gZBmBc5w165w@tosspot.sv.com>
Source record: 51288
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.swap

```
Selling -
Heathkit TU with 'Crossfire' tuning indicator. Has 850,
450 and 170 filters installed. All in excellent working condition,
factory aligned.

Great for RTTY, CW, AMTOR or PACTOR with the proper software.

$65 + $5 s/h

Lee
```

651. rec.radio.amateur.digital.misc Frequently Asked Questions

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-10-22 11:12:57 UTC
From: steve@wattres.SJ.CA.US
Message-ID: <radio/digital-faq-1-751288344@wattres.SJ.CA.US>
Source record: 51190
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.info,rec.answers,news.answers

```
Posted-By: auto-faq 2.4
Archive-name: radio/ham-radio/digital-faq

Frequently Asked Questions for Digital Amateur Radio
(Well, it's still mostly just packet...)

Version %I% - Last modified %G%

This document is for unlimited distribution.

Please send corrections and additions to:
digital-faq@wattres.sj.ca.us
Which will expand to a list of people who are familiar with most digital
issues. I hope. ;-)

The Digital Radio FAQ list will be posted on a monthly basis to
rec.radio.amateur.digital.misc, rec.radio.info, rec.answers, and news.answers.
The current version of this document is available via anonymous FTP at
ftp.cs.buffalo.edu.

Many FAQ's, including this one, are available on the archive site
rtfm.mit.edu in the directory pub/usenet/news.answers. The name under
which a FAQ is archived appears in the Archive-Name: line at the top
of the article. This FAQ is archived as radio/amateur/digital-faq.

There is also a mail server on rtfm.mit.edu, which can be addressed as
mail-server@rtfm.mit.edu. For details on how to operate this server,
send a message to that address with the word "help" in the BODY of the
message.

Table of contents:

1 Basic Packet Radio Information
1.1 What is packet radio?
1.2 What is amateur radio?
1.3 What can I do on packet radio?
1.4 Why packet over other digital modes?
1.5 What elements make up a packet station?
TNC (Terminal Node Controller)
Computer or Terminal
A radio
1.6 What do you mean we can all use the same channel?
1.7 What is AX.25 ?
1.8 What is RTTY ?
1.9 What is AMTOR ?
1.10 Definitions: Commonly used terms in Amateur Packet Radio
```

1.11 Do's and Don'ts : Rules and Regulations

2 Computing Network Resources for Amateur Digital radio
2.1 What Newsgroups/mailing lists are available?
2.2 What anonymous FTP sites and mail servers are available?
2.3 How do I contact the ARRL through email?
2.4 Are there any gateways for mail or news
2.4.1 The W2XO Internet mail <-> packet mail gateway
2.4.2 The N0ARY Internet mail <-> full packet BBS gateway
2.4.3 The N6QMY Internet mail <-> full packet BBS gateway
2.4.4 LAN Gateways (Packet wormholes via Internet)

3 Networking and special packet protocols
3.1 Are there any other protocols in use other than AX.25?
3.2 What is TCP/IP?
3.3 Networking Schemes
What are some of those other networking schemes?
Digipeaters
KA-Nodes
NET/ROM
ROSE
3.4 BBS message transfer

1 Basic Packet Radio Information

1.1 What is packet radio?

Packet radio is one method of digital communications via amateur radio. Packet radio takes any digital data stream and sends that via radio to another amateur radio station. Packet radio is so named because it sends the data in small bursts, or packets.

1.2 What is amateur radio?

Amateur Radio (sometimes called Ham Radio) is individuals using specified radio frequencies for personal enjoyment, experimentation, and the continuation of the radio art. Amateur radio operators must be licensed by their government. In the United States, the Federal Communications Commission issues amateur radio licenses. Normally, a test on operating practices, radio theory, and in some cases morse code proficiency test is administered. Amateur radio is not to be used for commercial purposes. Also, amateur radio operators are restricted from using profanity and using amateur radio for illegal purposes.

For more information on Amateur Radio in general, see the monthly frequently asked questions (FAQ) posting in rec.radio.amateur.misc. A copy of that FAQ is also available for FTP from ftp.cs.buffalo.edu and by mail from rtfm.mit.edu.

1.3 What can I do on packet radio?

Keyboard-to-Keyboard contacts:

Like other digital communications modes, packet radio can be used to talk to other amateurs. For those who cannot use HF frequencies, two amateurs can talk to each other from long distances using the packet radio network.

Packet BBS operations:

Many cities have one or more packet Bulletin Board System (BBS) available on the local packet network. Amateurs can check into the BBSes and read messages from other packet users on almost any topic. BBSes are networked together over the packet network to allow messages to reach a broader audience than just your local BBS users. Private messages may also be sent to other packet operators, either locally or who use other BBSes. BBSes have the latest ARRL, AMSAT, and propagation bulletins. Many BBSes have a file section containing various text files full of information on amateur radio in general.

DX Packet Cluster:

A recent development is use of packet radio for DX spotting. HF operators connect to the local DX Packet Cluster for the latest reports on DX. Often a user will 'spot' some hot DX and distribute the DX report real time.

File Transfer:

With special software, amateurs can pass any binary files to other amateurs. Currently, this is done with TCP/IP communications, YAPP, and other specialized protocols.

Satellite Communications:

Many of the amateur radio satellites contain microcomputer systems that can provide special information to amateurs. Some satellites contain CCD cameras on board and you can download images of the earth and the stars. Others provide store and forward packet mailboxes to allow rapid message transfers over long distances. Some satellites use AX.25, some use special packet protocols developed for satellite communications. A few transmit AX.25 packets over FM transmitters, but most use SSB transmissions.

1.4 Why packet over other digital modes?

Packet has three great advantages over most of the other digital modes: transparency, error correction, and automatic control.

The operation of a packet station is transparent to the end user; connect to the other station, type in your message, and it is sent automatically. The Terminal Node Controller (TNC) automatically divides the message into packets, keys the transmitter and sends the packets. While receiving packets, the TNC automatically decodes, checks for errors, and displays the received messages. In addition, any packet TNC can be used as a packet relay station, sometimes called a digipeater. This allows for greater range by stringing several packet stations together.

Packet radio provides error free communications because of built in error detection schemes. If a packet is received, it is checked for errors and will be displayed only if it is correct.

With VHF/UHF packet, many countries allow packet operators to operate in automatic control mode. This means that you can leave your packet station on constantly. Other users can connect to you at any time they wish to see if you are home. Some TNC's even have Personal BBSes (sometimes called mailboxes) so other amateurs can leave you messages if you are not at home.

The most important advantage of packet over other modes is the ability for many users to be able to use the same frequency channel simultaneously. No other digital mode yet gives this ability.

1.5 What elements make up a packet station?

TNC (Terminal Node Controller): A TNC contains a modem, a CPU, and the associated circuitry required to convert between RS-232 and the packet radio protocol in use. It assembles a packet from some of the data on the serial line, computing an error check (CRC) for the packet, modulates it into audio frequencies, and puts out appropriate signals to transmit that packet over the connected radio. It also reverses the process, translating the audio that the connected radio receives into a byte stream on the RS-232 port.

Most TNC's currently use 1200 BPS (bits per second) for local VHF and UHF packet, and 300 BPS for longer distance, lower bandwidth HF communication. Higher speeds are available for use in the VHF, UHF, and especially microwave region, but they often require unusual hardware and drivers.

Computer or Terminal: This is the user interface. A computer running a terminal emulator program, a packet-specific program, or just a dumb terminal can be used. For computers, almost any phone modem communications program can be adapted for packet use, but there are also customized packet radio programs available.

A radio: For 1200 BPS UHF/VHF packet, commonly available narrow band FM voice radios are used. For HF packet, 300 BPS data is used over single side band modulation. For high speed packet (anything greater than 1200 BPS), special radios or modified FM radios must be used.

1.6 What do you mean we can all use the same channel?

Packet radio uses a protocol called AX.25. AX.25 specifies channel access (ability to transmit on the channel) to be handled by CSMA (Carrier Sense Multiple Access). If you need to transmit, your TNC monitors the channel to see if someone else is transmitting. If no one else is transmitting, then the TNC keys up the radio, and sends its packet. All the other stations hear the packet and do not transmit until you are done. Unfortunately, 2 stations could accidentally transmit at the same time. This is called a collision. If a collision occurs, neither TNC will receive a reply back from the last packet it

sent. Each TNC will wait a random amount of time and then retransmit the packet.

In actuality, a more complex scheme is used to determine when the TNC transmits. See the "AX.25 Protocol Specification" for more information.

1.7 What is AX.25?

AX.25 (Amateur X.25) is the communications protocol used for packet radio. A protocol is a standard for how two computer systems are to communicate with each other, somewhat analogous to using business format when writing a business letter. AX.25 was developed in the 1970's and based of the wired network protocol X.25. Because of the difference in the transport medium (radios vs wires) and because of different addressing schemes, X.25 was modified to suit amateur radio's needs. AX.25 includes a digipeater field to allow other stations to automatically repeat packets to extend the range of transmitters. One advantage of AX.25 is that every packet sent contains the sender's and recipient's amateur radio callsign, thus providing station identification with every transmission.

1.8 What is RTTY?

RTTY (Radio TeleTYpe) is one of the more common communications protocols used in the HF bands. It is a half-duplex, non error-correcting mode that can be used by any number of stations on a frequency in a round-table fashion. Note that transmit/receive switching is manual, so all parties in a roundtable need to agree on who transmits next. It is primarily used for single keyboard-to-keyboard contacts. RTTY uses Baudot character encoding (also known as ITA2), which is a 5 bit code. Those who can do advanced math ;) will note that 5 bits is only 32 possible combinations, which is not enough for a full alphanumeric set, much less mixed-case alphabetics. Baudot (and RTTY) gets around this limitation by defining two "shifts" which switch between a "letters case," and a "figures case." On older RTTY setups (ones which actually use a teletype, for instance), you have to worry about the letters/figures shift. However, most TNCs and multimode digital controllers now do the "Right Thing(TM)" with respect to those shift characters, sending them as necessary for the data being transmitted. Lower case is not used on Baudot RTTY. ASCII can be used in RTTY as well, but it is very uncommon.

1.9 What is AMTOR?

AMTOR (AMateur Teleprinting Over Radio) is an error-correcting protocol used in the HF bands. It uses the same character set as Baudot (ITA2), but is encoded differently, so that each character has a constant mark to space ratio. This constant ratio is how errors are detected. Errors are corrected via either of two methods: ARQ (Automatic Retransmit reQuest), and FEC (Forward Error Correction).

In ARQ mode, exactly two stations connect to each other. The station with data to transmit (also known as the Information Sending Station, or

ISS) transmits 3 characters, and then waits for the other station (called the Information Receiving Station, or IRS) to send back an acknowledgement that those 3 characters were correctly received. This back-and-forth activity makes for the characteristic "chirp-chirp-chirp" of AMTOR ARQ operation. This also means that each transceiver needs to be able to switch from sending to receiving mode fairly quickly. The first time that you operate AMTOR ARQ with a relay-switched rig, you will be convinced that the rig is going to self-destruct. ;)

In FEC mode, one station can communicate with many others at once, since there is no back-and-forth acknowledging of data. FEC gets its error correction from time diversity, which is a fancy way of saying it sends each character twice. Actually, it interleaves the characters, so that the character is not repeated until 4 character times later. An example:
The text string to send is "This is FEC."
What comes out of the controller looks like "ThisThisis Fis FEC._EC._"
The receiving controller looks for which of the characters have a proper mark to space ratio, and prints the one that does. If neither do, it prints an error symbol.

1.10 Definitions: Commonly used terms in Amateur Packet Radio

44 net - The class A network designator for TCP/IP amateur packet radio. All numerical TCP/IP addresses are in the format 44.xxx.xxx.xxx.

AFSK - Audio Frequency Shift Keying. A method of representing digital information by using different audio frequencies modulated on a carrier.

AMPR - Amateur Packet Radio.

ampr.org - The high level domain recognized on Internet for amateur packet radio TCP/IP.

AMTOR - AMateur Teleprinting Over Radio. This protocol allows error-free point-to-point or multicast, single user per channel communications. Usually used on HF, but not VHF or above.

ARQ - Automatic Resend reQuest. This is the point-to-point error correcting mode for AMTOR. It works by sending bursts of 3 characters, and then the other station sends an OK/NotOK code for those 3 characters.

AX.25 - Amateur X.25 protocol. The basis of most packet systems. See section 1.7 for more information.

CRC - Cyclic Redundancy Check. The error detection scheme included in each packet. Verify that the packet was received error free.

CSMA - Carrier Sense Multiple Access. A system allowing many stations to use the same radio frequency simultaneously for packet communications.

digi - Short name for a digipeater

digipeater - A packet radio station used for repeating packets. See section 3.3.1 for more information.

FCC - Federal Communications Commission. Regulates and issues licenses for amateur radio in the United States.

FEC - Forward Error Correction. This is the multicast method of (almost) error-corrected communications on AMTOR. It works by sending each character twice.

FM - Frequency Modulation. The radio modulation scheme used for VHF and UHF packet communications.

FSK - Frequency Shift Keying. A method of representing digital information by shifting the radio carrier frequency different amounts to represent ones and zeros.

HDLC - (High-Level Data Link Control Procedures) A standard for high level link control. (ISO 3309)

KA9Q NOS - (KA9Q Network Operating System) A TCP/IP program originally developed by Phil Karn, KA9Q. Currently there are many different versions available. See section 3.2 for more information.

KA-Node - A simple networking scheme developed by TNC maker Kantronics. See section 3.3.2 for more info.

KISS - Keep It Simple Stupid. A simple interface developed for communications between TNCs and computers. This allows for most of the packet processing to be handled by the computer. Commonly used with packet TCP/IP software.

LAN - Local Area Network. A packet network developed for communications throughout a city or region. Often, the LAN uses separate frequencies from inter-city packet links.

modem - MODulator/DEModulator. Converts the analog signals into a binary data stream (a series of ones and zeros) for the TNC or a micro-computer. First step in decoding packets. It also converts binary data to analog, which is the last step in encoding packets.

NET/ROM - A scheme for packet radio networking. See section 3.3 for more information.

NODE - A network node. Often a network node running NET/ROM.

PPP - Point to Point Protocol. PPP is another protocol used for moving IP frames over a serial line. It supports host authentication, and non-transparent serial lines. It also has a standard way of negotiating header (and potentially data) compression over the line. See also SLIP.

protocol - A standard used for intercommunications between different computer systems.

RS-232 (RS-323C) - A (more or less) standard for interconnection of serial peripherals to small computer systems. In packet radio,

RS-232 is the most common interface between TNC's and the Computer/Terminal.

RTTY - Radio TeleTYpe. This protocol allows point-to-point or multicast, single user per channel communications, without error correction.

SLIP - Serial Line Internet Protocol. A trivial protocol for putting IP frames over a serial line to do (potentially) cheap TCP/IP networking. Approximately the same as KISS, except over wireline networks. See also PPP.

SSB - Single Side Band. The radio modulation scheme used for HF packet and satellite packet communications.

TAPR - Tucson Amateur Packet Radio. Was the first group to create a packet radio TNC using AX.25. Soon a TAPR TNC became cloned by many others. TAPR continues development of packet radio equipment.

TCP/IP - Transmission Control Protocol/Internet Protocol. A set of utility programs used over AX.25. See sections 3.2 for more information.

TNC - Terminal Node Controller. See section 1.5 for more information.

1.12 Do's and Don'ts : Rules and Regulations

NOTE: These regulations apply only to amateurs regulated by the FCC (United States), but often are similar to regulations in other countries.

[Since I have no experience with amateur radio in other countries, I cannot make any comments. Please bring any notable exceptions to my attention. -ed]

Although there are no specific rules that apply to amateur packet radio, the general amateur radio rules force some restrictions on packet usage.

Can I set up a TNC at home and one at work so I can check my Electronic mail via packet?

This cannot be done without special restrictions. Amateur radio rules prohibit any business. Since you could have mail from your boss (or maybe even someone selling you something over Internet), that would constitute business activity and is specifically prohibited.

Profanity can also be a complication. Since you have no control over the language used in E-mail, proper filtering is required. Since no filter scheme can catch every offense, it is best to say every message must be hand filtered.

I would like to set up a packet radio gateway between a land line computer network and the packet network. Is this possible?

Yes, and there are several such gateways in use, but they must be managed with caution. Electronic mail may be passed FROM the packet network INTO the land line network without intervention. However, mail passed TO packet radio is considered third party traffic (the sender is not an amateur) and these messages must be hand filtered to ensure that rules of message content are followed.

It's my license if I use packet radio illegally anyway, so what does anyone else care!?

Packet radio is one of the few NETWORKED systems in amateur radio. Many people have helped develop the network and there are many amateurs who own parts of the packet radio network. Sending packet BBS mail, digipeating, and sharing the channel involves the licenses of MANY people. Because of FCC rules stating that anything to come out of a transmitter (either in automatic mode or via your direct control) is the licensee's responsibility, one illegal message sent over the packet radio network could literally jeopardize the licenses of thousands of other amateurs. When in doubt, it is best to check with other amateurs about sending the message before it is sent.

I have some ideas on how to use packet radio in a new way, but I don't know if it is legal. Who could tell me if I can do it legally?

The worst thing you can do is talk to the FCC about such an issue. The FCC rules are written to be general enough to encompass but not restrict new radio activities. In the past, any non-thought-out requests sent to the FCC have meant a reduction of privilege for all amateur radio operators.

The best source for legal assistance is your national amateur radio association. In the United States, that is the American Radio Relay League (ARRL). Another good place for such conversations is over Usenet/packet mailing lists, or the amateur radio BBS network.

2 Computing Network Resources for Amateur Packet radio

This section summarizes the resources available on Internet for amateur packet radio operators.

2.1 What Newsgroups/mailing lists are available?

This is a list of all groups that regularly discuss amateur packet radio. For newsgroups, join the group through use of your news reader. For mailing lists, add a '-request' to the end of the list name to request subscriptions. For listserv groups, send mail to 'listserv' at the node which contains the list. The first line of the mail should be 'SUBSCRIBE groupname yourname'. Send the command 'help' for more information.

rec.radio.amateur.packet (Newsgroup): General discussions involving Packet Radio. This group was deleted on 21 September 93!

rec.radio.amateur.digital.misc (Newsgroup): General discussions about all aspects of digital transmissions over Amateur Radio. This group is a replacement for rec.radio.amateur.packet.

rec.radio.amateur.equipment (Newsgroup): May contain disuccsions about equipment related to digital amateur radio, specifically HF rigs that are good for HF digital modes, and the like.

rec.radio.amateur.homebrew (Newsgroup): Contains discussions on making your own gear, which includes packet, AMTOR, and RTTY equipment.

rec.radio.amateur.misc (Newsgroup): General amateur radio discussion. Usually does not contain any particular information about Digital Amateur Radio.

rec.radio.amateur.policy (Newsgroup): Discussion of regulation policies regarding every aspect of amateur radio. Occasionally deals with policies of packet coordination and legal issues of packet radio.

rec.radio.swap (Newsgroup): General For-Sale for any radio equipment. Occasionally will have packet equipment for sale. Recommended location for any amateur packet radio for-sale items.

info-hams@ucsd.edu (Listserv group): A digest redistribution of the rec.radio.amateur.misc Usenet discussion.

packet-radio@ucsd.edu (Listserv group): General discussions involving packet radio and packet-related issues.

ham-digital@ucsd.edu (Listserv group): A digest redistribution of the rec.radio.amateur.digital.misc Usenet discussion.

ham-policy@ucsd.edu (Listserv group): A digest redistribution of the rec.radio.amateur.policy Usenet discussion

hs-modem@wb3ffv.ampr.org (Mailing list): Discussion of high speed modems and radios available and future plans. Also includes discussion of networking using high speed modems. This list is not very active.

tcp-group@ucsd.edu (Mailing list): Group discussion of technical developments of TCP/IP over packet radio and use of the NOS TCP/IP programs.

gateways@uhm.ampr.org (Mailing list): Discussion of current gateways and future plans for gateways. May deal with sensitive internetworking issues.

listserv@knuth.mtsu.edu has several interesting mailing lists available:

GRAPES-L Discussions with GRAPES (Georgia Radio Amateur Packet Enthusiasts Society) on 56kb WAN's and the WA4DSY 56kb RF modem that they distribute.

TENNET-L Tennessee's efforts at a coordinated high-speed RF packet network

GRACILIS-L Discussions on Gracilis tcp/ip packet equipment.
Includes some of the people from Gracilis.

KA9Q-UNIX Discussions on porting and using various versions
of KA9Q Unix/Xenix NET/NOS under any of a variety
of Unix/Xenix variants.

TNV-HAMS General discussions amoung email connected
amateur radio operators in and surrounding
Tennessee

Send a message with a body of "HELP" to get help from the list server. Also,
Internet users may now INTERACTIVELY work with the ListServ there by:

telnet knuth.mtsu.edu 372

or

telnet 161.45.1.1 372

For all lists at ucsd.edu, archives may be found via anonymous FTP at
ucsd.edu. Some listserv groups also have archives. Send the command
'help' to the group's listserv for more information. Digest mailings
for the ucsd.edu discussions are also available. Send mail to
listserv@ucsd.edu with the first line being 'longindex' for more
information.

Terry Stader (KA8SCP) <tstader@aol.com> maintains a list of Mac
packet-related software, and posts it periodically (somewhat less often
than monthly) to rec.radio.amateur.digital.misc.

Carl Trommel <carl@codewks.nacjack.gen.nz> posts the weekly news bulletin
of the ZL Data Group to rec.radio.amateur.digital.misc. This bulletin
covers the current happenings in New Zeland's packet network.

There appears to be a mailing list about NOS on hydra.carleton.ca, but
I don't have much more detail. Send a message to
nos-bbs-request@hydra.carleton.ca. The list name is nos-bbs@hydra.carelton.ca.

2.2 What anonymous FTP sites and electronic mail servers are available
for getting packet radio information and programs?

This is a sampling of FTP sites that carry amateur packet radio related
files. Consult the Archie archive server for info on locating
particular files. For more information on using archie, send mail to
archie@cs.mcgill.edu with the line 'help'.

ucsd.edu

Primary distribution site of KA9Q's derived TCP/IP packages. Also,
general packet radio information in the /hamradio/packet subdirectory.

wuarchive.wustl.edu

Very large collection of amateur radio software. This stuff used to
be on wsmr-simtel20.army.mil, but that system (and service) was

discontinued as of 1 Oct 93 for budgetary reasons. WUArchive used
to "just" mirror Simtel20, and still has all the files that were
on Simtel20 when it shut down.

ftp.cs.buffalo.edu

Supplimental archive site for amateur radio information. Contains
current copies of all rec.radio.amatuer.* FAQ's.

tomcat.gsfc.nasa.gov

Packet software including Baycomm, ROSE, G8BPQ, NOS, etc.
(I have one report (from George Hitz, W1DA) that this FTP site will be
down until the end of this summer, 1993. Reportedly the site admin is
going to be in Sweden.)

akutaktak.andrew.cmu.edu

SoftKiss for the Mac, in /aw0g. Requires NET/Mac.
SoftKiss is an init/cdev/driver that allows a MAC to do packet using
a Poor Man's Packet modem.

sumex-aim.stanford.edu

NET/Mac is the port of KA9Q's NET program. It doesn't have nifty features
like scrolling or saving the windows, but the individual sessions can be
recorded into a file.

As for mail servers, there is only one that I know of at the moment:

Ham-Server@GRAFex.Cupertino.CA.US

This mail server, which is run by Steve Harding (KA6ETB), has a wide
variety of information on most aspects of amateur radio, not just digital
modes. Send a message with the body HELP to get a fairly useful listing.
Also note that Steve posts the index from the server approximately weekly
to rec.radio.amateur.misc, rec.radio.amateur.digital.misc, and sbay.hams.

2.3 How do I contact the ARRL via electronic mail?

There are various addresses at ARRL HQ, but the most important one is
probably info@arrl.org. That is where general information about the
ARRL can be acquired. This address reaches a person, so you'll have
to specify what/who you're looking for.

2.4 Are there any gateways for mail or news between Internet and
Amateur Packet radio?

Internet / Packet Radio BBS Gateways

There are currently two comprehensive gateways between the Internet and
the packet radio BBS system. One is run by Jim Durham, W2XO, in Pennysylvania
and the other, which allows access to PBBS bulletins, as well as mail,
is run by Bob Arasmith, N0ARY, in California.

2.4.1 The W2XO Gateway

To mail from Internet to Packet:

1. Mail to: "bbs@w2xo.pgh.pa.us"

2. Make the first line of the text a Packet BBS "send" command, ie:
SP TOCALL @ BBSCALL.ROUTING-HINTS < FROMCALL

3. The "subject" line of the Internet mail becomes the "title" line
of the Packet BBS mail.

NOTE: Because of FCC regulations, Jim must hand filter each message
sent FROM Internet TO the Amateur Packet Radio BBS system. Messages
should be of minimal length and appropriate content. Read Section 1.9
(Do's and Don'ts: Rules and Regulations) regarding appropriate usage of
packet radio for more information. Always include the routing hints
with the BBS callsign.

To mail from Packet to Internet:

1. The amateur radio operator must have his callsign registered in
the gateway alias list. If you want to mail from packet to a specific
amateur on Internet, send mail to 'durham@w2xo.pgh.pa.us' (Internet) or
'W2XO @ W2XO.#WPA.PA.USA.NOAM' (Packet BBS mail) with his/her amateur
callsign and their Internet address.

2. Once the above is accomplished, packet BBS mail should be sent to
'CALL @ W2XO.#WPA.PA.USA.NOAM'. The mail will automatically be
forwarded to the Internet address of the amateur with the 'CALL'
callsign.

Jim Durham's Internet address is 'durham@w2xo.pgh.pa.us'.

2.4.2 The N0ARY Internet mail <-> full packet BBS gateway

Bob Arasmith, N0ARY, runs a gateway between the Internet mail system and
the PBBS system. His gateway allows you to read, post, and respond to other
postings on the PBBS system via email. For more information, send mail
to gateway_info@arasmith.com.

2.4.3 The N6QMY Internet mail <-> full packet BBS gateway

Patrick Mulrooney, N6QMY, also runs a gateway between the Internet mail
system and the PBBS system. His gateway allows you to read, post, and
respond to other postings on the PBBS system via email. For more
information, send mail to gateway-info@lbc.com.

Users are required to register with the gatway to allow automatic forwarding
of mail from the Internet to Packet. No registration is needed to send
mail from Packet to the Internet. To register, send the following
information to gateway-request@lbc.com:
CALL:
FIRST NAME:
LAST NAME:
CITY & ST:
COUNTRY

ZIP:
HOME BBS:

2.4.4 LAN Gateways (Packet wormholes via Internet)

Currently a group of amateurs are experimenting with connecting packet LANs together via Internet IP inside IP Encapsulation. Some of the gateways only accept TCP/IP packets, others AX.25 packets. These gateways uses the Internet as a transport medium, thus it is impossible to access the packet radio network from Internet. For more information, join the Gateways mailing list by sending mail to "gateways-request@uhm.ampr.org".

3 Networking and special packet protocols

This is a sample of some of the more popular networking schemes available today. By far, there are more customized networking schemes used than listed. Consult your local packet network guru for specific network information.

3.1 Are there any other protocols in use other than AX.25?

AX.25 is considered the defacto standard protocol for amateur radio use and is even recognized by many countries as a legal operation mode. However, there are other standards. TCP/IP is used in some areas for amateur radio. Also, some networking protocols use other packet formats than AX.25.

Often, special packet radio protocols are encapsulated within AX.25 packet frames. This is done to insure compliance with regulations requiring packet radio transmissions to be in the form of AX.25. However, details of AX.25 encapsulation rules vary from country to country.

3.2 What is TCP/IP?

TCP/IP stands for Transmission Control Protocol/Internet Protocol. This is commonly used over the Internet wired computer network. The TCP/IP suite contains different transmission facilities such as FTP (File Transfer Protocol), SMTP (Simple Mail Transport Protocol), Telnet (Remote terminal protocol), and NNTP (Net News Transfer Protocol)

TCP/IP doesn't use all of the AX.25 protocol. Instead, it uses special AX.25 packets called Unnumbered Information (UI) packets and then puts its own special protocol (called IP) on top of AX.25. This is used to increase efficiency of its transmissions, since IP does not require packets to be "reliable", that is to say, guaranteed delivered error-free. TCP handles the retransmission of lost and garbled packets in its own way, at a higher level. Therefore the extra information in an AX.25 "VC" (virtual circuit) frame is not useful, and thus consuming needed bandwidth.

The KA9Q NOS program (also called NET) is the most commonly used version of TCP/IP in packet radio. NOS originally was written for the

PC compatible. However, NOS has been ported to many different computers such as the Amiga, Macintosh, Unix, and others. Smaller computers like the Commodore 64 and the Timex-Sinclar do not currently have version of NOS available.

3.3 Networking Schemes

What are some of those other networking schemes?

During the early days of amateur packet radio, it became apparent that a packet network was needed. To this end, the following packet network schemes where created.

Digipeaters

The first networking scheme with packet radio was Digipeaters. Digipeaters would simply look at a packet, and if its call was in the digipeater field, would resend the packet. Digipeaters allow the extension of range of a transmitter by retransmitting any packets addressed to the digipeater.

This scheme worked well with only a few people on the radio channel. However, as packet became more popular, digipeaters soon were clogging up the airwaves with traffic being repeated over long distances. Also, if a packet got lost by one of the digipeaters, the originator station would have to retransmit the packet again, forcing every digipeater to transmit again and causing more congestion.

KA-Nodes

Kantronics improved on the digipeater slightly and created KA-Nodes. As with digipeaters, KA-Nodes simply repeat AX.25 frames. However, a KA-Node acknowledges every transmission each link instead of over the entire route. Therefore, instead of an end-to-end acknowledgement, KA-Nodes allow for more reliable connections with fewer timeouts, because acknowledgments are only carried on one link. KA-Nodes therefore are more reliable than digipeaters, but are not a true network. It is similar like having to wire your own telephone network to make a phone call.

NET/ROM

NET/ROM was one of the first networking schemes to try to address the problems with digipeaters. A user connects to a NET/ROM station as if connecting to any other packet station. From there, he can issue commands to instruct the station to connect to another user locally or connect to another NET/ROM station. This connect, then connect again, means that to a user's TNC, you are connected to a local station only and its transmissions do not have to be digipeated over the entire network and risk loosing packets. This local connection proved to be more reliable.

NET/ROM is a commercial firmware (software put on a chip) program that is used as a replacement ROM in TAPR type TNC's. Other programs are

available to emulate NET/ROM. Among them are TheNet, G8BPQ node switch, MSYS, and some versions of NET.

NET/ROM nodes, at regular intervals, transmit to other nodes their current list of known nodes. This is good because as new nodes come on-line, they are automatically integrated in the network. However, if band conditions such as ducting occur, ordinarily unreachable nodes can be entered into node lists. This causes the NET/ROM routing software to choose routes to distant nodes that are impossible. This problem requires users to develop a route to a distant node manually defining each hop instead of using the automatic routing feature.

ROSE

ROSE is another networking protocol derived from X.25. Each ROSE node has a static list of the nodes it can reach. For a user to use a ROSE switch, he issues a connect with the destination station and in the digipeater field places the call of the local rose switch and the distant rose switch the destination station can hear. Other then that, the network is completely transparent to the user.

ROSE's use of static routing tables ensures that ROSE nodes don't attempt to route packets through links that aren't reliably reachable, as NET/ROM nodes often do. However, ROSE suffers from the inability to automatically update its routing tables as new nodes come online. The operators must manually update the routing tables, which is why ROSE networks require more maintainance.

3.4 BBS message transfer

Many of the BBS programs used in packet radio allow for mail and bulletins to be transferred over the packet radio network. The BBSes use a special forwarding protocol developed originally by Hank Oredsen, W0RLI.

Besides full service BBSes, many TNC makers have developed Personal BBS software to allow full service BBSes to forward mail directly to the amateur's TNC. This allows operators to receive packet mail at night and avoid tying up the network during busy hours.

--
Steve Watt KD6GGD Packet: KD6GGD @ N0ARY.#NOCAL.CA.USA.NA
ICBM: 121W 56' 53.1" / 37N 20' 16.7" Internet: steve@wattres.SJ.CA.US
Never trust a computer bigger than you can lift. also news,root,sys,uucp,...

652. Viruses and Packet radio

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-04 14:31:32 UTC
From: jangus@skyld.tele.com
Message-ID: <752423492snx@skyld.tele.com>
Source record: 51194

In article <CFwp5C.9xA@cbfsb.cb.att.com> fvdbord@cbnewsg.cb.att.com writes:

> If I use Baycom for Packet radio and I set "remote off" is there
> any chance that anyone can install a virus on my PC from a remote
> system? Would it be possible if I set "remote on" ?

//remote off = no external control.

//remote on = questionable access from "friends"

Additionally, the "real" source of virus contamination is from uploaded
software. (i.e., binary file transfers) but this assumes that the file
your retrieve is contaminated. It doesn't pick anything up in transfer.

73 es GM from Jeff.

PS, who many years ago would fall victim to "//color 0 0" on digicom.

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "It is difficult to imagine our
Internet: jangus@skyld.tele.com | universe run by a single omni-
US Mail: PO Box 4425 Carson, CA 90749 | potent god. I see it more as a
Phone: 1 (310) 324-6080 | badly run corporation."

653. Re: Ham-Digital Digest V93 #100

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-06 06:12:13 UTC
From: furb02@ufsc.BR
Message-ID: <9311060412.AA04779@com2>
Source record: 51191

[B[A

654. Re: ECPA is untested law. Cellular mods may well be legal.

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-06 08:02:04 UTC
From: Ed Ellers <EDELLERS@delphi.com>
Message-ID: <931106.10924.EDELLERS@delphi.com>
Source record: 51192

Seems to me that the easy way to state this is that (A) the courts must assume that the Constitution is valid and that laws can only be enforced if they do not conflict with the Constitution, BUT (B) the cops -- and everyone else -- must assume that a new law is valid unless and until the courts say otherwise.

655. Re: 9k6

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-06 12:31:48 UTC
From: fmitch@netcom.com
Message-ID: <fmitchCG2LH1.J6C@netcom.com>
Source record: 51193

SP5WCA (andy@mimuw.edu.pl) wrote:
: Hello!

: Is there anyone actually using 9600 (or more) packet, especially not for
: lame satelites but for normal ground network. I'm especially interested
: in how to make a xtal radio work on 9k6...

: ---

: 73 de Andy SP5WCA

: /------------------+--------+------------------+------------------------\
: I Andrzej K. Brandt I SP5WCA I andy@mimuw.edu.pl I sp5wca@sp5pbe.wa.pol.eu I
: \------------------+--------+------------------+------------------------/

hi andy... mitch here in mobile...

we are using 9600 baud on our dx cluster backbone on 145.600 Mhz. and our
bbs 446.100 Mhz. backbone along the gulf coast here... we have a variety
of modems and radios in use... the xmit mod for 9600 usually is trivial
if the radio was true fm and used a variactor diode to fm the crystal...
just feed 9600 baud out of the modem to the variactor diode... but
receiving is a little more complicated... post what kind of modems
and radios you are considering using... our group has experience with
almost all of the 9600 modems and several radios...

mitch, wa4osr
fmitch@netcom.com

--
---
fmitch@netcom.com
Felton "Mitch" Mitchell, WA4OSR in Mobile, Alabama USA
205-342-7259 home, 205-476-4100 work, 205-476-0465 FAX
co-sysop for W4IAX bbs running fbb ... sysop for WA4OSR DXCluster in Mobile..
---

656. Unicode Adoption (Re: RTTY v. AMTOR v. PACTOR -- dumb question)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-06 19:17:08 UTC
From: William=E.=Newkirk%Pubs%GenAv.Mlb@ns14.cca.CR.rockwell.COM
Message-ID: <199311061924.LAA14732@ucsd.edu>
Source record: 51196

> You mean written, roman-character-set-based language, right? Until
>unicode comes into common use, sending text written in languages like
>Chinese or Uygur or Serbo-Croatian, etc... is really not terribly practical.
>Kenneth E. Harker, N1PVB

maybe here's a chance to start something. i know of unicode but i don't know enough. has it become standardized enough to be able to be something we can start using in amateur radio (as in we could write software or build hardware for it for now and when the PC guys catch up we'll be ready for them)?

hate to see another long delay like there was with ASCII.

sounds like a project to me (maybe even a mag article). ARRL to coordinate or should TAPR or AMRAD be the "in charge" group?

could drag the whole computer industry along for the ride....tee hee.

bill wb9ivr

657. sstv? on 14.230 kHz

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-06 19:40:17 UTC
From: tgosse@world.std.com
Message-ID: <CG35B6.2LJ@world.std.com>
Source record: 51195

This afternoon, Nov. 7, I heard a group of hams on 14.230 kHz sending sstv to each other. I tried to decode it with jvfax60's sstv mode. But, I had no luck.

The jvfax60 program has modes like b/w 8, 16, 32 and "Scottie" and "Martin." The hams were using modes like "Robot 72."

Can the jvfax60 program recieve the "Robot" modes? Is there a program that will?

Thanks in advance for your help,

Tom Gosse, N1PHG
--

Tom Gosse
N1PHG
tgosse@world.std.com

658. Re: Kiss AX25 driver for Unix ???

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-06 20:29:28 UTC
From: peter@globv1.hacktic.nl
Message-ID: <1993Nov6.202928.5291@globv1.hacktic.nl>
Source record: 51199

whitemp@cnsvax.uwec.edu writes:

>Has anyone added a ax25 driver (or kiss) to the kernel of a Unix box?

Fred van Kempen, is writing AX.25 drivers for the Linux kernel. This is what
he wrote in the HAMS channel on the Linux mailing list:

--- cut here ---
Hi All,

Hey, I didn't even know about the very existence of this
channel...

Anyway. Christophe said:

>Hi, i guess the subject says it all. I heard some rumours about KISS being
>supported, but could not find info anywhere.

Correct. I indeed added a KISS driver (it talked to every TNC-2
I could find, including my KAM on both ports), and am slowly im-
plementing an AX.25 socket layer. I already wrote some simple
clients and servers for this (AXterm, AXbeacon, AXtermd, ...)
and they react fine to incoming AX frames.

Of course, the layer will also run on loopback only (AXterm mycall :-)
for testing and gateway looping. I am considering porting the F6FBB
BBS program to Linux, thus giving us a nice, wellknown BBS as well.

>Is there any support for AX25 connected mode? I guess UI would be enough
>to get current TCPIP (44.x.y.z) going, but a "complete" implementation
>would be much nicer.
Yes, connmode is supported. I got the

A->B SABM
B->A UA
....
A->B DISC || B->A DISC
B->A UA || A->B UA

sequence running now, but I am still waiting for the AX.25 2.0
specs to arrive here (they were delivered to my US home address
yesterday, it'll take another couple of days before they arrive
here in NL) so I can check out which kind of exceptions I should
be able to handle in the receiver state is not what the sender
thinks it is. Currently, I simply send a DM for any packet not
being an SABM if we are not in CONN state...

UI frames are done, but I want all protocol stacking to be in an
external process (i.e. the IP-over-AX bridge, the AX-over-IP
bridge, etc.) so the kernel layer is as small as possible.

Fred
--
Fred N. van Kempen Certified Linux/PRO Engineer :-)
MicroWalt Corporation Software Development waltje@uwalt.nl.mugnet.org
Hoefbladhof 27, 2215DV VOORHOUT, The Netherlands Tel (+31) 2522-30205

"...I Wanna Lay You Down , In A Bed Of Roses ! (Jon Bon Jovi)"
--- ereh tuc ---

Groetjes,
Peter Busser
--
Linux, the choice of a GNU generation.

659. Telephone info (area codes ++++)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-06 22:32:21 UTC
From: pmarsh@metro.mccneb.EDU
Message-ID: <9311062232.AA24913@metro.mccneb.edu>
Source record: 51197

Comments from Robert Casey (followed by Brian Battles) about phone company area codes reminds me to tell y'all:

Check out by ftp: lcs.mit.edu /telecom-archive

This has all kinds of stuff about telephone system operations, areacode history, dialups to internet, FCC rulings, stories & remeniscenses, etc -- 4 pages of file listings.

Paul Marsh N0ZAU Omaha: no ding-a-ling himself
Opinions expressed are unlikely to even be UNDERSTOOD by my employer.

660. Re: Help on KISS mode

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-06 22:39:02 UTC
From: njbirdman@delphi.com
Message-ID: <9311061733593.njbirdman.DLITE@delphi.com>
Source record: 51198

Sounds like the battery in your TNC is bad, causinmg it to reset itself.

661. KISS V7 binary

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-07 06:39:15 UTC
From: kkrallis@leon.nrcps.ARiadne-t.GR
Message-ID: <9311070639.AA08906@leon.nrcps.ariadne-t.gr>
Source record: 51200

```
Could somebody assemble the KISS V7 ROM and upload it
to UCSD.EDU for us who don't have a Z-80 Cross Assembler?
The *.MAC source code is in ucsd.edu:/hamradio/packet/tcpip/incoming/kissv7.zip

73 Costas <kkrallis@leon.nrcps.ariadne-t.gr>

-----------------------------------------------------------------
| Dr. K. Krallis, SV1XV * Research Engineer
| Metallurgy Lab., National Technical University of Athens
| ------
| Internet: kkrallis@leon.nrcps.ariadne-t.gr [143.233.2.1]
| Packet radio: sv1xv@sv1uy.ath.grc.eu
| AMPRnet: sv1xv@sv1xv.ampr.org [44.154.1.11]
| Snail Mail: P.O.BOX 3066, GR-10210 Athens, GREECE
-----------------------------------------------------------------
```

662. HAM-server index file

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-08 05:48:53 UTC
From: HAMSinfo@GRAFex.sbay.org
Message-ID: <gate.752737733@GRAFex.sbay.org>
Source record: 51212
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc

```
Executed: Mon Nov 08 00:48:45 1993

NOTE: New email address:
HAM-server@GRAFex.sbay.org

Index of files.

NOTES: ----------------------------------------------------------------------

If you do not know how to use HAM-server, send email to
HAM-server@GRAFex.sbay.org. In the text, place HELP.

If you order a file and do not get it, check the index to be sure you have
spelled the filename correctly. If you have ordered the file correctly,
then order a new INDEX, as I may have moved the file to a different
directory. The system is still expanding, and I am trying to keep it in
managable chunks.

Also, if you have ordered files from HAM-server and do not receive them, it
might be because your return path is incorrect. My bounce mailbox fills up
quite regularly with bounce messages. And, since the path is incorrect, I
cannot contact you to let you know.

Orders must be sent to HAM-server. Orders sent to KA6ETB or HAMSinfo are
ignored. If you are reading this from usenet, do not respond to this post.
You must send email to HAM-server@GRAFex.sbay.org.

A new INDEX is automatically generated weekly and when files are moved or
added.

The archives may contain the same file under different names. If you should
run across one of these, please let me know with email to
KA6ETB@GRAFex.sbay.org

-------------------------------------------------------------------------------

Directory: /hamradio/

00-INDEX.TXT 10197 11-03-93

Directory: /hamradio/10meters/

10MBEACO.LST 6233 3-26-93

Directory: /hamradio/advanced/

ADV21.ZIP 103501 6-18-93
ADVANCED.FRQ 1275 8-15-91
```

Directory: /hamradio/antennas/

ANTENNAS.BAS 2227 3-26-93
ANTENNAS.TXT 7771 2-02-93
BUTERNUT.TXT 6106 3-26-93
CRPT2NTA.TXT 10713 2-02-93
DISCONE.TXT 1805 3-26-93
LOADPOLE.ZIP 7542 3-01-93
MININEC3.ZOO 164929 3-01-93
MOBILE.TXT 4458 3-26-93
PORTABLE.ANT 1735 5-26-93
YAGIMAX.ZIP 352305 3-01-93

Directory: /hamradio/arrl/

ARRLBBS.TXT 3153 3-03-93
ARRLDIGI.TXT 23303 2-02-93
ARRLINDX.TXT 17591 3-02-93
ARRLINFO.TXT 3321 2-02-93
ARRLJOB.TXT 18455 2-02-93
ARRLLOGO.PS 2911 2-02-93
ARRLPIO.TXT 116131 2-02-93
QSLBURO1.TXT 14440 2-02-93
QSLBURO2.TXT 10117 2-02-93

Directory: /hamradio/bandplan/

BANDPLAN.DOC 2528 3-24-92
PLAN129.TXT 1928 8-12-91
PLAN222.TXT 585 12-22-91
PLAN2M.TXT 522 8-12-91
PLAN440.TXT 572 8-12-91
PLAN6M.TXT 249 8-12-91
PLAN900.TXT 1108 8-12-91

Directory: /hamradio/callbook/

CALBK-WP.TXT 4064 8-17-92
CALLBOOK.C 18991 3-26-93
CLBK-ARY.TXT 1592 12-28-90
CLBK-EYH.TXT 1480 3-07-93
CLBK-INT.TXT 2280 3-06-93
CLBK-IYA.TXT 556 11-23-91

Directory: /hamradio/code/

AUTOCW.ARC 60849 3-01-93
CODETEST.HIN 7287 3-26-93
CW.ARC 62536 3-01-93
CW104.ZIP 83367 3-01-93
FFTMORSE.ZIP 27344 3-01-93
HAMCOM21.ZIP 182531 3-01-93
MACHINE.ARC 13061 3-01-93
MOR21.ZIP 53013 6-18-93

MORSE.BAS 5661 3-01-93
MORSE30B.ZIP 71113 3-01-93
MORSETST.BAS 7179 3-01-93
PROCW.ZIP 24227 3-01-93
ROBOCOPY.ZIP 27346 3-01-93
SM316.ZIP 109484 3-01-93

Directory: /hamradio/contests/

CONTEST.ARC 25065 3-01-93
CONTEST.ZIP 147989 3-01-93
CT626.ZIP 178372 3-01-93
UNIGRID2.BAS 12341 3-26-93
WHATSON.ARC 15826 3-01-93
WLOGDEMO.ZIP 163276 3-01-93
WRTLOG60.ZIP 836615 6-08-93

Directory: /hamradio/dx/

AUTOLOG4.ARC 165621 3-01-93
DXB20DMO.ZIP 129658 3-01-93
DXCC104.ARC 120117 3-01-93
DXCCK2DI.TXT 15904 2-02-93
DXLOCATE.LST 35911 3-26-93
DXLOG185.ZIP 171738 3-01-93
HAM_LOG.ZIP 94848 3-19-93
HFPROP.BAS 12300 3-26-93
LOGBOOK.ARC 104668 3-01-93
LOGBOOK.ZIP 83422 3-19-93

Directory: /hamradio/exams/

AUTOEXAM.ZIP 251630 3-01-93
EXAMCRDT.TXT 6490 2-02-93
EXAM_OPS.TXT 7431 2-02-93
HAMQUIZ.ZIP 101015 3-19-93
HAMSTACK.TXT 3439 2-02-93
HANDICAP.TXT 9632 2-02-93
VEFC24.ARC 26774 3-01-93

Directory: /hamradio/extra/

EXT21.ZIP 99672 6-18-93
EXTRA.FRQ 1157 8-25-91

Directory: /hamradio/general/

GEN012.ZOO 24160 6-18-93
GEN21.EXE 83879 3-19-93
GEN21.ZIP 72931 6-18-93
GENTEST.EXE 136865 1-11-92

Directory: /hamradio/help/

BCUMAHAM.TXT 5156 3-28-93
BITFTP.HLP 11347 5-09-93
ELMER100.ZIP 65425 3-01-93
ELMERS.DIR 46722 3-07-93
ELMRINFO.TXT 6984 2-02-93
ELMRLIST.TXT 46722 3-07-93
FAQ_HAM1.TXT 20412 2-02-93
FAQ_HAM2.TXT 33497 2-02-93
FAQ_HAM3.TXT 86169 3-07-93

Directory: /hamradio/hf/

COMB6.ZIP 43190 3-01-93
GC103.ARC 23776 3-01-93
MICROMUF.BAS 4881 3-01-93
MICROMUF.PAS 7695 3-01-93
SOL_GEO.DAT 24836 2-02-93
SOL_TERA.TXT 27028 2-02-93

Directory: /hamradio/internet/

FTPSITES.TXT 3480 6-06-93
GATEWAYS.TXT 5785 2-02-93
HAMEMAIL.TXT 223537 2-02-93
NEWSGRPS.TXT 6917 2-02-93
RECINFO.TXT 9252 3-14-93
USNETSEL.TXT 8164 2-02-93

Directory: /hamradio/macstuff/

ADVANCED.SIT 133986 4-11-93
EXTRA.SIT 128944 4-11-93
FREQVALE.HQX 112932 8-17-93
GENERAL.SIT 97148 4-11-93
MAC525_1.HQX 89968 8-17-93
MAC535.HQX 122083 8-17-93
MCMORSIT.HQX 44983 7-14-93
MORSE.MAC 263 3-02-91
NOVICE.SIT 121453 4-11-93
SAVANTDM.HQX 178005 8-17-93
SAVNTUPD.HQX 80757 8-17-93
SOFTKISS.HQX 145274 8-17-93
SOFTWARE.MAC 24267 10-13-93
SOURCE93.06 23768 6-20-93
TECH.SIT 107031 4-11-93

Directory: /hamradio/misc/

9PN-25PN.TXT 676 3-27-93
AUTOLOG.ZIP 109886 3-19-93
BATTRIES.TXT 9694 2-02-93
BBS_LIST.TXT 41800 2-28-93
BEACONS.INF 2284 7-29-92
CA-PHONE.BBS 1338 11-06-92

```
CHART.C 1999 3-26-93
CONDOR.INF 2870 9-26-92
CONDORMP.TXT 3486 7-16-89
EASYLOGR.ZIP 228482 3-19-93
FCC-PRB1.TXT 25754 4-05-93
FLNTALAW.TXT 3528 2-02-93
HAMPLTES.TXT 5507 2-02-93
HAM_READ.ARC 1366 3-19-93
K1EA-619.EXE 315212 3-19-93
K2UYH.ARC 108510 3-19-93
LOGOS.PS 9258 2-02-93
MAILORDR.TXT 20383 2-02-93
MAP.ZIP 802214 3-19-93
MARS.FRQ 987 8-28-93
NICADS.INF 6533 3-26-93
PRO-2004.MOD 4418 3-26-93
PRO-2004.REV 18797 3-26-93
QSLCARD1.PS 27337 3-26-93
QSLCARD2.PS 6399 3-26-93
RFI.TXT 1991 3-17-93
RFI001.TXT 2158 6-08-89
RFI002.TXT 1815 6-08-89
RFI003.TXT 3288 6-08-89
RFI_TIPS.TXT 5948 2-02-93
SCANNER.MOD 5287 3-26-93
SMITHCHA.PS 23664 3-26-93
UC-U2AT.REV 7239 3-26-93
VHFPROP.BAS 24498 3-26-93

Directory: /hamradio/mods/

2ETO2AT.MOD 1443 8-07-93
56KBFIX.MOD 1093 5-26-93
741AMODS.ZIP 8974 5-26-93
760XLT.MOD 490 5-26-93
ALLBAND.MOD 2870 5-26-93
ALR22T.MOD 2152 5-26-93
BC205XLT.MOD 4221 5-26-93
DJ-580 155310 5-26-93
DJ500.MOD 2885 5-26-93
DR510.MOD 4186 5-26-93
FRQSGALR.ZIP 206290 5-26-93
FT-530.MOD 2302 8-07-93
FT101E.MOD 2639 5-26-93
FT209RH.MOD 1034 5-26-93
FT212RH.MOD 1345 5-26-93
FT23R.MOD 776 5-26-93
FT411.MOD 4824 5-26-93
FT411-2.MOD 1026 5-26-93
FT470-2.MOD 9942 5-26-93
FT470-3.MOD 1951 5-26-93
```

FT4700.MOD 1195 5-26-93
FT727CAT.MOD 2520 5-26-93
FT727R.MOD 1071 5-26-93
FT747GX.MOD 1221 5-26-93
FT767GX.MOD 1452 5-26-93
HT-24-T.MOD 3581 7-24-93
IC-24.MOD 2071 5-26-93
IC-MU2.MOD 1186 5-26-93
IC02.MOD 2082 5-26-93
IC02-2.MOD 1231 5-26-93
IC02-3.MOD 861 5-26-93
IC04.MOD 1897 5-26-93
IC24-2.MOD 993 5-26-93
IC24-3.MOD 5387 5-26-93
IC2410.MOD 4437 5-26-93
IC28.MOD 479 5-26-93
IC2SAT.MOD 4994 5-26-93
IC2SAT-2.MOD 8131 5-26-93
IC32.MOD 2501 5-26-93
IC32-2.MOD 2719 5-26-93
IC3200A.MOD 452 5-26-93
IC37.MOD 3900 5-26-93
IC735IBM.MOD 1407 5-26-93
IC900.MOD 2945 5-26-93
ICOM32AT.MOD 1937 5-26-93
ICOM735.1 3614 5-26-93
ICOM735.2 1380 5-26-93
ICOM735- 3614 5-26-93
ICW2A.MOD 13392 5-26-93
KAMDCD.MOD 2048 5-26-93
KENWD930.MOD 6640 5-26-93
NOAASTNS.ZIP 20995 5-26-93
PK232LOK.MOD 1858 5-26-93
PORTABLE.ANT 1735 5-26-93
PRO2004.MOD 5157 5-26-93
PRO2005.MOD 2602 5-26-93
PRO2006.MOD 3119 5-26-93
PRO2020.MOD 4775 5-26-93
PRO34.MOD 1239 5-26-93
R7000.MOD 3404 5-26-93
R7000-2.MOD 26880 5-26-93
RADIO.MOD 4915 5-26-93
RDIOMODS.SRV 956 5-26-93
TC2DUPLX.MOD 1581 5-26-93
TH-215A.MOD 2174 3-26-93
TH215 2072 5-26-93
TH215.MOD 2227 5-26-93
TH225.MOD 2932 5-26-93
TH25.MOD 7811 5-26-93
TH27A 6725 5-26-93

TH28A 2608 5-26-93
TH75.MOD 1385 5-26-93
TINY2TNC.MOD 1431 5-26-93
TM-721A.MOD 4867 3-26-93
TM-741-M 17526 5-26-93
TM2570A.MOD 778 5-26-93
TM321A.MOD 600 5-26-93
TM321A-2.MOD 957 5-26-93
TM321A-3.MOD 1415 5-26-93
TM421A.MOD 1836 5-26-93
TM701.MOD 2979 5-26-93
TM701A.MOD 280 5-26-93
TM721.MOD 4228 5-26-93
TM721-2.MOD 2784 5-26-93
TM721-3.MOD 6073 5-26-93
TM721A 13389 5-26-93
TM731.MOD 1612 5-26-93
TM741.MOD 1230 5-26-93
TM941A-2.MOD 2723 5-26-93
TNC2.MOD 1589 5-26-93
TNC2A.MOD 3329 5-26-93
TS-930S.MOD 2226 3-26-93
TS140.MOD 563 5-26-93
TS430.MOD 825 5-26-93
TS430-2.MOD 844 5-26-93
TS430MOD.DOC 2719 3-26-93
TS430S.REV 5066 3-26-93
TS440.MOD 1589 5-26-93
TS440-AT.MOD 971 5-26-93
TS440S.INT 9986 3-26-93
TS680.MOD 514 5-26-93
TS680-2.MOD 2940 5-26-93
TS711.MOD 123 5-26-93
TS790A.MOD 5059 5-26-93
TS850-1.MOD 12088 5-26-93
TS850-2.MOD 9086 5-26-93
TS930.MOD 6931 5-26-93
TS940IBM.MOD 2539 5-26-93
U2AT.MOD 3161 5-26-93
UNI2510.MOD 1622 5-26-93

Directory: /hamradio/newfiles/

AMPR.ORG 409718 7-06-93
FRQSGALR.ZIP 206290 5-26-93
NETAMSRC.ARC 56320 9-29-93
NETMAC52.SIT 178633 9-29-93
NETMAC55.SIT 179770 9-29-93
NET_AMIG.ARC 108322 9-29-93
NET_BM.ARC 37772 9-29-93
NET_DES.ARC 26249 9-29-93

NET_DOC.ARC 143194 9-29-93
NET_EW.ARC 115955 9-29-93
NET_MAC.HQX 223461 9-29-93
NET_READ.ME 2443 9-29-93
NOAASTNS.ZIP 20995 5-26-93
NTEX_MS.ARC 118873 3-19-93
PCECAP.ZIP 100174 3-19-93
TEC20.ZIP 88796 3-19-93
TEC21.EXE 95783 3-19-93
TRAVINFO.LST 38204 3-26-93
TUNEUP.TNC 2557 7-03-91
UC-U2AT.REV 7239 3-26-93
WIRETAP.TXT 32215 3-26-93

Directory: /hamradio/novice/

NOV21.EXE 106365 3-19-93
NOVICE25.ARC 50049 3-01-93
NOV_TEST.ZIP 95588 3-01-93

Directory: /hamradio/nts/

3RDPARTY.LST 1802 9-09-91
CANADA.ADR 375 2-14-90
COUNTRY.ADR 2975 11-25-91
NTS12.ZIP 93145 6-18-93
NTSDISK.EXE 37401 11-20-91
RGRAM27.ZIP 48027 3-19-93
ZIPCODE.EXE 214180 2-22-93

Directory: /hamradio/packet/

9600BAUD.PKT 8154 3-06-91
A802MANP.TXT 35627 8-10-93
AMTORFRQ.TXT 9158 10-13-93
ARYGATE.TXT 10286 4-11-93
AX25SPEC.TXT 66235 3-30-93
BBSTIP01.TXT 1435 1-04-91
BBSTIP02.TXT 1868 1-04-91
BBSTIP03.TXT 1869 1-04-91
BBSTIP04.TXT 2032 1-04-91
BBSTIP05.TXT 2196 1-04-91
BBSTIP06.TXT 1132 1-04-91
BBSTIP07.TXT 1180 1-04-91
BBSTIP08.TXT 863 1-04-91
BBSTIP09.TXT 2260 1-04-91
BBSTIP10.TXT 1325 1-04-91
BBSTIP11.TXT 1755 1-04-91
BBSTIP12.TXT 2222 1-04-91
BBSTIP13.TXT 2305 1-04-91
CATEGORY.LST 3477 1-26-92
CHEAPPKT.TXT 4258 3-30-93

FAQ.TXT 33570 3-08-93
FAQ_PAKT.TXT 29942 2-02-93
HFBBS.TXT 19833 10-13-93
HFHINTS.TXT 3020 4-05-90
HI-SPEED.NET 15864 8-07-93
HIERADR.DOC 4849 6-15-90
INFOPAKT.TXT 39574 2-02-93
KAM401.ARC 156061 3-01-93
NEXTGEN.BBS 3948 3-21-93
PKTINFO1.TXT 2891 2-20-93
PKTINFO2.TXT 6338 2-02-93
ROUTING.TXT 28069 3-26-93
RTTY12G.ARC 126651 3-01-93
SETTINGS.TNC 1089 7-03-91
TTY37.ARC 36600 3-01-93
WP.DOC 1507 5-09-93
XPCOM131.ZIP 403741 5-29-93

Directory: /hamradio/packet/loz/

00-INDEX.TXT 2446 4-19-93
PACKET01.LOZ 3746 3-03-93
PACKET02.LOZ 9436 3-04-93
PACKET03.LOZ 6675 3-07-93
PACKET04.LOZ 7372 3-10-93
PACKET05.LOZ 6155 3-17-93
PACKET06.LOZ 15037 3-23-93
PACKET07.LOZ 5707 5-11-92
PACKET08.LOZ 6715 5-12-92
PACKET09.LOZ 4578 5-12-92
PACKET10.LOZ 8698 1-31-93
PACKET11.LOZ 6493 1-31-93
PACKET12.LOZ 5881 5-13-92
PACKET13.LOZ 6285 5-29-92
PACKET14.LOZ 7157 5-13-92
PACKET15.LOZ 4714 5-14-92
PACKET16.LOZ 3396 5-14-92
PACKET17.LOZ 4683 5-14-92
PACKET18.LOZ 2168 5-14-92
PACKET19.LOZ 4902 5-15-92
PACKET20.LOZ 7564 5-15-92
PKTINF01.TXT 4109 7-22-91
PKTINF02.TXT 6580 7-28-91
PKTINF03.TXT 4555 8-06-91
PKTINF04.TXT 3806 8-12-91
PKTINF05.TXT 4484 8-21-91
PKTINF06.TXT 4192 9-03-91
PKTINF07.TXT 4885 9-09-91
PKTINF08.TXT 4676 9-17-91
PKTINF09.TXT 3938 10-01-91
PKTINF10.TXT 2786 10-28-91

PKTINF11.TXT 3412 11-12-91
PKTINF12.TXT 7717 11-26-91
PKTINF13.TXT 2480 12-17-91
PKTINF14.TXT 2499 1-06-92
PKTINF15.TXT 2975 1-06-92
PKTINF16.TXT 1646 1-14-92

Directory: /hamradio/packet/software/

APL700.EXE 412928 8-26-93
FE.ZIP 16626 7-14-93
GP.DOC 125349 7-24-93
GP-1X50.ZIP 370518 7-06-93
LANDC159.EXE 153301 3-19-93
LANLK159.EXE 192812 3-19-93
PAX285.ZIP 15395 7-14-93
PCT214.ZIP 378739 3-01-93
PKGOL624.ZIP 323067 3-26-93
PKTSFTWR.TXT 4185 2-02-93
RTTY12G.ARC 126651 3-01-93
SELCAL11.ZIP 12590 3-01-93
TTY37.ARC 36600 3-01-93
XPCOM131.ZIP 403741 5-17-93

Directory: /hamradio/packet/software/aa4re/

AA4REBBS.INF 2654 4-11-93
AA4REBBS.ZIP 357277 3-19-93
B21TANSI.ZIP 3620 5-26-93
BB21HC.ZIP 259837 5-26-93
BB21HL.ZIP 110380 5-26-93
BB21HN.ZIP 358648 5-26-93
BB21HP.ZIP 239199 5-26-93
DOC211.ZIP 99644 5-26-93
HH21H.INF 1377 5-26-93
MBB35SRC.ZIP 72475 5-26-93
MBBIOS35.ZIP 29299 5-26-93
MBBIOS38.ZIP 39704 5-26-93
WATCHDOG.ZIP 8425 5-26-93

Directory: /hamradio/packet/software/dsp/

DOC.ZIP 301000 9-02-93
DSP105.ZIP 46817 9-02-93
DSP4SCHE.ZIP 238499 9-02-93
DSPTIPUP.ZIP 21417 9-02-93
SOURCE.ZIP 671625 9-02-93

Directory: /hamradio/packet/software/g8bpq/

BPQ405E.ZIP 143360 5-26-93
BPQ406.ZIP 170880 5-26-93
BPQ406A.ZIP 20216 5-26-93

BPQ406E.ZIP 181926 5-26-93
RSWD0330.ZIP 66213 5-26-93
RZSW30.ZIP 97411 5-26-93
TFPCX.ZIP 34817 5-26-93

Directory: /hamradio/packet/software/thebox/

BOOTARC.EXE 243874 7-19-93
INSTALL.BAT 174 7-19-93
NOS_1229.EXE 203295 7-06-93
NOS_1229.LP 172009 7-06-93
NOS_1229.MAN 221639 7-06-93
NOS_1229.MAP 75531 7-06-93
NOS_1229.NR 168281 7-06-93
NOS_1229.VER 52 7-06-93
SOURCARC.EXE 131999 7-19-93
SYSARC.EXE 105377 7-19-93
SYSOP15.ENG 65121 7-19-93
UPDATE.BAT 1354 7-19-93

Directory: /hamradio/packet/software/thenet/

THENET.FLA 6498 7-19-93
THENET.INF 4005 7-19-93
THENET.PAR 3692 7-19-93
TNET-X1G.TXT 68 7-19-93
TNET-X1G.ZIP 119680 7-19-93
TNET-X1H.ZIP 123904 7-19-93

Directory: /hamradio/packet/software/f6fbb/

FBB515.ZIP 991152 7-30-93
TPK181.ZIP 579533 7-30-93

Directory: /hamradio/packet/software/wa7mbl/

OIZ-UTIL.ARC 64062 7-30-93
REQDIR.ARC 34438 7-30-93

Directory: /hamradio/packet/software/wa8ded/

TNCDED.DOC 29130 7-30-93
TNCDED.HEX 45068 7-30-93
TNCDED.MSG 4116 7-30-93
WA8DED 1004 7-30-93
WA8DED.DOC 14790 7-30-93
WA8DED.ROM 19284 7-30-93

Directory: /hamradio/packet/tcpip/

00-INDEX.TXT 1602 6-08-93
AMPR.ORG 409718 7-06-93
AMPRHOST 303457 7-06-93
AMPRINFO.TXT 5603 2-02-93

AMPRXORG.REV 516969 7-06-93
ASMOBJ.MSG 607 6-08-93
ASMOBJ.ZIP 6766 6-08-93
BMEXE332.ZIP 30898 6-08-93
BMSRC_ST.ARC 25334 8-07-93
CONNEX.Z 12030 7-06-93
E920603.ZIP 189423 6-08-93
EXPIRY.ZIP 53196 6-08-93
HELP_V02.ZIP 11984 7-06-93
INTRONOS.ZIP 54272 7-06-93
MAN-9106.ZIP 57169 6-08-93
NAN24HYC.ZIP 42635 6-08-93
NOS-SLFP.ZIP 310211 6-08-93
NOSVIEW.ZIP 1764 7-06-93
NOSVW304.ZIP 682322 7-06-93
PCNET.EXE 227498 4-26-92
PKTDRVR.INF 157 6-08-93
ROSE-NOS.ZIP 18050 7-06-93
S920603.ZIP 656302 6-08-93
SATTRACK.ZIP 34886 7-06-93
SLFP123.ZIP 30476 6-08-93
TCPIP.INF 5818 6-02-93
VIEW9206.ZIP 384591 6-08-93

Directory: /hamradio/packet/tcpip/bm/

BM.DOC 16641 9-02-93
BM332C.TXT 235 9-02-93
BM332C.ZIP 52889 9-02-93
BMEXE.ARC 38547 9-02-93
BMH02.TXT 790 9-02-93
BMH02EXE.ZIP 300305 9-02-93
BMH02SRC.ZIP 60096 9-02-93
BMUTIL.ZIP 11546 9-02-93
VIEW0207.ZIP 320436 9-02-93

Directory: /hamradio/packet/tcpip/docs/

BEGIN.DOC 110255 2-07-91
FAQ-1292 75121 7-06-93
INTRONOS.ZIP 54272 7-06-93
KA9QBGN.ZIP 190366 6-08-93
KA9QNOS.NR 141577 7-06-93
KA9QNOS.PS 133704 7-06-93
NETNIX.PS 286542 7-06-93
NOSBGNLP.ZIP 57488 7-06-93
NOSBGNPS.ZIP 137021 7-06-93
RSPF22P.TXT 85164 7-06-93
TAPR92.TXT 72334 7-06-93
TAPR9600.MOD 11209 7-06-93
TDMA.TXT 12713 7-06-93

USERMAN.ZIP 112344 7-06-93

Directory: /hamradio/packet/tcpip/g1emm/

G1EMMKIT.EXE 168079 7-06-93
G1EMMKIT.ZIP 213973 7-06-93
KH113016.EXE 193643 7-06-93
KH113016.ZIP 593938 7-06-93
PCELM21.ZIP 116682 7-06-93
READ.ME 1077 7-06-93
SMALLEMM.EXE 134945 7-06-93

Directory: /hamradio/packet/tcpip/gpsnos/

GPSC1DOC.ZIP 38361 7-30-93
GPSC1EXE.ZIP 162104 7-30-93
GPSC1HLP.ZIP 13415 7-30-93
GPSC1SRC.ZIP 638737 7-30-93

Directory: /hamradio/packet/tcpip/gracilus/

GCALLBK.TXT 440 7-06-93
GCALLBK.ZIP 13914 7-06-93
GRAC20M2.ZIP 539910 7-06-93
P10DVR.TXT 824 7-06-93
P10DVR.ZIP 25230 7-06-93
P10R30E.TXT 29184 7-06-93
P10R30E.ZIP 291851 7-06-93
TWINDV21.ZIP 38656 7-06-93

Directory: /hamradio/packet/tcpip/pa0gri/

GR-BUGS.BEE 5120 7-06-93
GR-NOTES.BEE 19584 7-06-93
GRIBEE08.ZIP 831616 7-06-93
GRNOS08.ZIP 268800 7-06-93
GRNOS08S.ZIP 257408 7-06-93
NOS_1229.DOC 172009 7-06-93
NOS_1229.EXE 203295 7-06-93
NOS_1229.MAN 221639 7-06-93
NOS_1229.MAP 75531 7-06-93
NOS_1229.ROF 168281 7-06-93
NOS_1229.VER 52 7-06-93
NOS_1229.ZIP 821866 7-06-93
RSPF0826.TXT 294 7-06-93
RSPF0826.ZIP 53695 7-06-93

Directory: /hamradio/packet/tcpip/pe1chl/

920420.DIR 6353 7-06-93
920420LT.ARC 175565 7-06-93
920420MT.ARC 111710 7-06-93
920420TC.ARC 153934 7-06-93

920420TP.ARC 104054 7-06-93
920420TS.ARC 113244 7-06-93
AUTOEXEC.DRS 2321 7-06-93
HISTORY.ARC 48620 7-06-93
NETDOC1.ARC 16485 7-06-93
NETDOC2.ARC 44672 7-06-93
PACSAT.ARC 87474 7-06-93
PB920430.ZIP 131138 7-06-93
PE1CHL.NET 417 7-06-93
README.CHL 384 7-06-93
SCCPRIN5.ARC 159020 7-06-93

Directory: /hamradio/packet/tcpip/wg7j/

JNOS107B.EXE 283045 7-06-93
JNOS107B.ZIP 987123 7-06-93
WG7JDOC.ZIP 46266 7-06-93

Directory: /hamradio/rigs/

COMPICOM.TXT 15707 3-26-93
FRGLOD10.ZIP 14451 4-01-93
HF_RIGS.TXT 4317 2-02-93
HT_INFO.TXT 10990 2-02-93
IC-12AT.REV 6682 3-26-93
IC-32AT.MOD 2715 3-26-93
IC02A.MOD 2424 3-26-93
IC02ATR.MOD 3294 3-26-93
IC28H.REV 6855 3-26-93
ICOM.C 9232 3-14-93
ICOM-110.C 9842 3-26-93
ICOMCI-V.CMD 7443 3-26-93
INFOEQPT.TXT 10063 2-02-93
KENWD930.MOD 6640 3-26-93
MNUFCTRS.TXT 5051 2-02-93
QST_REVW.TXT 41097 2-02-93
R7000.HIN 26430 3-26-93

Directory: /hamradio/satelite/

DOVE3W13.ZIP 43150 3-01-93
ELETRANS.C 2176 3-26-93
GEOSAT20.ZIP 56405 3-01-93
HAM_SAT.TXT 10967 2-02-93
ORBIT23.ARC 36852 3-01-93
PROTOCOL.1 39022 6-19-89
PROTOCOL.2 2157 6-19-89
QUICKS24.ZIP 77120 3-01-93
SATELITE.BAS 5642 3-01-93
SATELITE.HOW 18571 3-26-93
SATTAIM.ARC 1860 3-01-93
SATTRACK.INF 5017 3-26-93

TRAK280.ZIP 346847 3-01-93
USAT92B2.ZIP 86782 3-01-93
WU120EXE.ZIP 222368 3-01-93

Directory: /hamradio/satelite/arsene/

ARSENE.TXT 1968 7-19-93
TELEM14G.ZIP 29363 7-19-93
TELEM14H.ZIP 29447 7-19-93
TELEMENG.ZIP 39938 7-19-93
TELEMFRA.ZIP 40680 7-19-93

Directory: /hamradio/sstvfax/

AUTOFAX.ARC 12452 3-01-93
FFT.COM 52096 2-02-93
FFTH.COM 53760 2-02-93
JVFAX50.ZIP 407934 3-01-93
SSTVFAX2.ZIP 28323 3-01-93
SSTVWFAX.TXT 37309 2-02-93
WEFAX.ARC 35968 3-01-93
WXRDR22.ARC 98944 3-01-93

Directory: /hamradio/swl/

FAQ_SWL.TXT 21936 2-02-93
SWL114.ZIP 302908 3-01-93
SWL_INFO.TXT 20666 2-02-93

Directory: /hamradio/technici/

TEC22.ZIP 74516 6-18-93
TECHTEST.EXE 148542 1-11-92

Directory: /hamradio/utility/

ARJ230NG.EXE 200704 6-18-93
ARJ241A.EXE 223856 8-07-93
BINHEX.HQX 89586 8-17-93
BOOZ.ZIP 12639 6-18-93
COMP16.ZIP 16102 6-18-93
COMP430D.ZIP 20241 6-18-93
FILTER11.ARC 55936 3-01-93
INTMOD60.ARC 11902 3-01-93
JLEM.ZIP 14846 2-02-93
OHMSLAW.ARC 22197 3-01-93
PDZIP.ZIP 63473 6-18-93
PKUNZIP.EXE 23528 3-15-90
PKUNZIP2.EXE 28806 5-17-93
QEXTRACT.ZIP 43123 6-18-93
RC85PR15.ZIP 50983 3-01-93
RFTOOLS.ARC 144799 3-01-93
UNARJ230.ZIP 39074 6-18-93

```
UNZIP.EXE 26838 6-18-93
UNZIP41.ARC 121470 6-18-93
UNZIP41.EXE 21933 6-18-93
UUDECODE.BAS 5709 3-28-93
UUDECODE.C 5565 3-28-93
UUDECODE.DOC 519 3-28-93
UUEXE521.ZIP 32455 8-24-93
WHERITIS.ARC 30943 3-01-93
ZIP.EXE 59260 6-18-93
ZIP10EX.ZIP 158335 6-18-93
ZOO210.EXE 55721 6-18-93

Directory: /hamradio/vlf/

1750MTR.TXT 6532 2-02-93
```

663. KPC-3 vs. PK-232??????????HELP!

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-08 08:26:11 UTC
From: fsrla@aurora.alaska.edu
Message-ID: <1993Nov7.232611.1@aurora.alaska.edu>
Source record: 51201

```
Hello!!!!!!
I'm quite new and was wondering what the difference
is between the KPC-3 and the PK-232...Judging from
price there must be some.
What modes do these support?
Please email me with info!!!!!!!!!!
-------------------------------------THANKS----------------------
Roger Asbury WL7NT
FSRLA@AURORA.ALASKA.EDU
```

664. Are there multi-*CHANNEL* TNC's ???

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-08 09:31:58 UTC
From: U211321@HNYKUN11.URC.KUN.NL
Message-ID: <16C80941E.U211321@HNYKUN11.URC.KUN.NL>
Source record: 51202

Hello,
I'm thinking of experimenting with digital connections on CB.
Since CB-channels are notably very dirty, I was wondering if the
AX.25 or some other protocol provided for CHANNEL-info in the packets.
I imagine that if you got a CB-transceiver as well as a -receiver,
the latter could constantly scan for relatively clean channels,
approximate the cleanest one, pass this on to the transceiver,
which will incorporate this info in the last packet sent (and
acknowledged) on the current channel (the receiving station
would acknowledge and switch to the channel specified, as will
the sender) or some similar protocol extension.
My query is: has there already been thoughts in this direction,
practical implementations, or even TNC's and adapted CB-equipment ?
Many thanks,

Bob u211321@hnykun11.BITNET
u211321@hnykun11.urc.kun.NL
++

665. Re: Kiss AX25 driver for Unix ???

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-08 10:29:37 UTC
From: mime@dk3hg.hanse.de
Message-ID: <CG655D.F8@dk3hg.hanse.de>
Source record: 51213

peter@globv1.hacktic.nl (Peter Busser) writes:

>whitemp@cnsvax.uwec.edu writes:

>>Has anyone added a ax25 driver (or kiss) to the kernel of a Unix box?

>Fred van Kempen, is writing AX.25 drivers for the Linux kernel. This is what
>he wrote in the HAMS channel on the Linux mailing list:

Hi All,

what is the "HAM channel on the Linux mailing list" ?

Michael

[..]
--
+---+
| E-Mail: dk3hg@dk3hg.ampr.org DK3HG@DB0HBS.DEU.EU mime@dk3hg.hanse.de |
| System: Linux running Wampes QTH Ammersbek JO53CQ |
+---+

666. Kenwood TM331: 9600 baud mods??

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-08 10:51:00 UTC
From: oopdavid@ubvms.cc.buffalo.edu
Message-ID: <CG68ty.5ur@acsu.buffalo.edu>
Source record: 51203

How does anyone go about modifying a Kenwood TM441 or 331 radio
to run 9600 baud packet? People tell me you can tap off the
circuit board. Has anyone done this? Plan to use Tiny-2 TNCs.
73, Dave.

667. Re: Unicode Adoption (Re: RTTY v. AMTOR v. PACTOR -- dumb question)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-08 15:31:49 UTC
From: kharker@bnr.ca
Message-ID: <2blop5$fbo@crchh941.bnr.ca>
Source record: 51227

In article <199311061924.LAA14732@ucsd.edu>,
William=E.=Newkirk%Pubs%GenAv.Mlb@ns14.cca.CR.rockwell.COM writes:
|> > You mean written, roman-character-set-based language, right? Until
|> >unicode comes into common use, sending text written in languages like
|> >Chinese or Uygur or Serbo-Croatian, etc... is really not terribly practical.
|> >Kenneth E. Harker, N1PVB
|>
|> maybe here's a chance to start something. i know of unicode but i don't know
|> enough. has it become standardized enough to be able to be something we can
|> start using in amateur radio (as in we could write software or build hardware
|> for it for now and when the PC guys catch up we'll be ready for them)?

Well, I'm sure it's standardized to some degree. In a technical bookstore
not too long ago, I saw a several hundred page book that was mostly pages and
pages of characters and their unicode number equivalent.

|> hate to see another long delay like there was with ASCII.
|>
|> sounds like a project to me (maybe even a mag article). ARRL to coordinate
|> or should TAPR or AMRAD be the "in charge" group?
|>
|> could drag the whole computer industry along for the ride....tee hee.
|>
|> bill wb9ivr

Well, the big problem with a move to unicode from ascii (as opposed to the
move to ascii from baudot, et al) is that while baudot and friends were 5
bit encodings, ascii was a 7 bit encoding - not a whole lot bigger. Well, now we
have ascii at 7 bits, and the next step is unicode, which is 32 bits. Over four
times as much information needs to be trasmitted to put up the same character now.
Which of course makes things slower/less reliable/more complex, etc... Which
isn't to say that it's impossible - but it would be a big leap.

And who's going to come up with a font that has 2^32 different characters in
it, anyway? :-)

--
==
Kenneth E. Harker BNR "Any opinions expressed
kharker@bnr.ca Richardson, Texas, USA are solely mine and do
N1PVB (214) 684-5115 not represent BNR"
==

668. Re: ftp access by packet

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-08 15:33:49 UTC
From: djenkins@wang.com
Message-ID: <CG6J8D.6r7@wang.com>
Source record: 51204
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.policy

andy@mimuw.edu.pl (SP5WCA) writes:

>PMARANDA@vm1.ulaval.ca (Roger-Daniel Laberge) writes:
>> Is there any way to get access to Internet and FTP sites thru packet radio?
>Technically yes, but it's illegal (3rd party stuff)

Why would that be illegal?!?!? How is that any different than my using an autopatch? In both cases I am using remotely located ham equipment to access a non-ham realm. As long as the content of the transmissions are Part 97 compliant then no harm no foul.

With TCP/IP where individual packets are passed in real time (rather than in store and forward mode like AX25) it is unclear (to me) how the FCC's recent rulings on holding the originating and first forwarding stations jointly accountable for content would apply, but that is still only goes to the question of content.

Let's Followup-To: rec.radio.amateur.policy

73, N1MXV (For those who actually care, that's WITH code.)

669. Re: KISS reset

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-08 15:38:15 UTC
From: w6swe@w6swe.tapr.ORG
Message-ID: <332@w6swe.tapr.org>
Source record: 51206

>I've noticed with my 1270's and 1278's that the persistance and
>slottime settings seem to disappear over time. If I set my
>persistance to 255 (there's only 3 of us on the freq. and we're
>never on at the same time) things go out lickety-split. If I
>come back in a 1/2 hour and try again, things are dead slow. I've
>noticed on the MFJ's that the sta and con led's flash every so
>often like the tnc has been reset. Looks like the tnc is
>resetting itself and wiping out myu parameters. All the MFJ's
>I've have do the same thing. Any ideas??

The later versions of MFJ firmware (and TAPR 1.1.7 and 1.1.8) have
a reset timer which will reset the KISS parameters to the defaults
after 3 minutes of inactivity. This is an even larger problem for
satellite users who use full duplex. TAPR 1.1.8a has the older
version of KISS without the reset patched into the code. Also, I
believe all versions of KISS-only proms do not do this. The timer
was put in to get around an obscure problem with KISS hanging up.
(IMHO, the cure was worse than the original problem, which I've
never experienced). There are a few folks working on the KISS
code trying to come up with a solution.

Bob

Bob Nielsen, W6SWE Internet: w6swe@tapr.org
Tucson, AZ AX.25: w6swe@kc7cg.az.usa.na
Amateur IP: 44.124.12.16

670. Re: Need chip numbers

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-08 15:44:43 UTC
From: w6swe@w6swe.tapr.ORG
Message-ID: <333@w6swe.tapr.org>
Source record: 51205

In Ham-Digital Digest #101, enge@almaden.ibm.com writes:

> Need some chip numbers to do some repairs. The chips are U7,
>U8, U9, and U10 on a DRSI PCPA-2 (two vhf port) card and U9 and
>U10 on a TAPR TNC-2.

I can't help you on the DRSI, but on the TNC-2, U9 is a 74HC14 and
U10 is a 74HCT04.

Bob

Bob Nielsen, W6SWE Internet: w6swe@tapr.org
Tucson, AZ AX.25: w6swe@kc7cg.az.usa.na
Amateur IP: 44.124.12.16

671. Re: Are there multi-*CHANNEL* TNC's ???

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-08 17:11:27 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1993Nov8.171127.11704@ke4zv.atl.ga.us>
Source record: 51209

In article <16C80941E.U211321@HNYKUN11.URC.KUN.NL> U211321@HNYKUN11.URC.KUN.NL (Bob) writes:
>Hello,
>I'm thinking of experimenting with digital connections on CB.
>Since CB-channels are notably very dirty, I was wondering if the
>AX.25 or some other protocol provided for CHANNEL-info in the packets.
>
>I imagine that if you got a CB-transceiver as well as a -receiver,
>the latter could constantly scan for relatively clean channels,
>approximate the cleanest one, pass this on to the transceiver,
>which will incorporate this info in the last packet sent (and
>acknowledged) on the current channel (the receiving station
>would acknowledge and switch to the channel specified, as will
>the sender) or some similar protocol extension.
>My query is: has there already been thoughts in this direction,
>practical implementations, or even TNC's and adapted CB-equipment ?
>Many thanks,

There's no provision in the AX25 protocol for such link management.
There is, however, a new standard called ALE, Automatic Link Establishment,
that hunts for the best channel at the moment and signals the radios in
the network to switch to it. It's a rather complex protocol designed for
the US Federal government and is a general method for linking radios
regardless of the type of modulation content they are attempting to
transmit. This has been outlined recently in QEX. It's likely overkill
for your application.

In general, I'd say that packet and voice use don't coexist
very well in an uncontrolled environment. The packet annoys
the voice users and may lead to jamming problems. And of course
the sporadic nature of voice signals means that a channel that
seems clear at one instant likely won't be at the next. The best
bet is to gain local cooperation among your CB users to reserve
one channel for packet work. You'll still be bothered with skywave
signals at times, but this is the best and simplest solution. This
all assumes of course that packet is legal on your country's CB
band which I believe it is. Some places allow it, others like the US,
do not.

Gary
--
Gary Coffman KE4ZV |"If 10% is good enough | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | for Jesus, it's good | uunet!rsiatl!ke4zv!gary
534 Shannon Way | enough for Uncle Sam."| emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -Ray Stevens |

672. ??using KPC-3 for CW with DC-program

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-08 17:30:38 UTC
From: szhall@bullwinkle.ucdavis.edu
Message-ID: <CG6on2.56x@ucdavis.edu>
Source record: 51207

I am new at this packett and I have a question..I am using a Kantronics KPC-3 with DC-PROGRAM software and I noticed I can do cw with the set up..Any tryed it? If so I have a couple questions...tnx..Jeff

673. Re: 9k6

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-08 19:03:23 UTC
From: andy@mimuw.edu.pl
Message-ID: <1993Nov8.190323.9135@fuw.edu.pl>
Source record: 51208

In article J6C@netcom.com, fmitch@netcom.com (Felton Mitchell) writes:

> SP5WCA (andy@mimuw.edu.pl) wrote:
> : Is there anyone actually using 9600 (or more) packet, especially not for
> : lame satelites but for normal ground network. I'm especially interested
> : in how to make a xtal radio work on 9k6...

> hi andy... mitch here in mobile...

In mobile? And typing while driving?

> we are using 9600 baud on our dx cluster backbone on 145.600 Mhz. and our
> bbs 446.100 Mhz. backbone along the gulf coast here... we have a variety
> of modems and radios in use... the xmit mod for 9600 usually is trivial
> if the radio was true fm and used a variactor diode to fm the crystal...
> just feed 9600 baud out of the modem to the variactor diode... but
> receiving is a little more complicated... post what kind of modems
> and radios you are considering using... our group has experience with
> almost all of the 9600 modems and several radios...

We are considering G3RUH/DF9IC compatibile modems from BayCom Team - we don't care about that compatibility, but it seems that there are no others in the market.

And we will probably use BayCom KS-900 data radios, because we considered some ex-proffessional polish xtal radios, but after some research I was sure that we won't be able to get them for 432 MHz...

We want to set up a fast TCP/IP network, with some Linux hosts - no lame BBSes or other such stuff allowed hi.

---

73 de Andy SP5WCA

/------------------+--------+------------------+------------------------\
I Andrzej K. Brandt I SP5WCA I andy@mimuw.edu.pl I sp5wca@sp5pbe.wa.pol.eu I
\------------------+--------+------------------+------------------------/

674. Re: sstv? on 14.230 kHz

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-08 19:05:49 UTC
From: "F. Kevin Feeney" <fkf1@cornell.edu>
Message-ID: <2bm5adINNf2v@newsstand.cit.cornell.edu>
Source record: 51210

In article <CG35B6.2LJ@world.std.com> Thomas Gosse, tgosse@world.std.com
writes:
>This afternoon, Nov. 7, I heard a group of hams on 14.230 kHz sending
>sstv to each other. I tried to decode it with jvfax60's sstv mode.
But,
>I had no luck.
>
>The jvfax60 program has modes like b/w 8, 16, 32 and "Scottie" and
>"Martin." The hams were using modes like "Robot 72."
>
>Can the jvfax60 program recieve the "Robot" modes? Is there a program
>that will?
>

I just got JVfax6.0 and it doesn't seem to support the robot modes.
However when I last listened to the crew on 230 (check 233 also,
sometimes there is an overflow group up there) Scottie 1 seemed
to be the prevelant mode. JVFAX does a bang up job on that.

Slowscan.zip will copy 8 second BW robot, but nothing else in the
shareware version. The forsale version copies other modes, but only
displays in BW so far. It uses a soundblaster board to process the
audio.

THe author of Pasokon apparently has a receive only version for sale
now, not sure what kind of hardware it uses, but it seems to receive
all the modes the regular pasokon does - and that includes Robot. I use
the regular Pasokon here in my shack.

BTW, while we are on SSTV - 20 has been kind of flat lately up here.
Anybody know of any sstv activity on 80 or 40?

73 de Kevin, WB2EMS (fkf1@cornell.edu)

675. broadcasting

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-09 00:05:44 UTC
From: todd@goat.geo.arizona.edu
Message-ID: <2bmmso$nc4@organpipe.uug.arizona.edu>
Source record: 51211

what sort of equiptment do i need in order to broadcast on an AM or FM frequency.-sorry if this is the wrong BBS.
todd

676. baycom14e

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-09 13:37:25 UTC
From: mitch@cmptrc.lonestar.org
Message-ID: <CG88ID.67s@cmptrc.lonestar.org>
Source record: 51214

I just recently downloaded a shareware version of Baycom 14e. I plan on
using it with a 1200 baud modem I have at the shack. What I need is advice
on making up a cable to go between the modem and my kenwood th25at handheld.
Can anyone help me?

Thanks!
Mitcheal
KA5SOI
(tech+ upgrading to general as soon as I can get the code behind me!)

677. Re: KISS reset (more questions)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-09 18:35:34 UTC
From: ecudhm@eds.ericsson.se
Message-ID: <1993Nov9.203534.1@eds.ericsson.se>
Source record: 51215

The MFJ 1270 seems to periodically reset itself (actually, it RESTARTs with default settings for persist, txdelay, etc., but stays in KISS mode).

There has been some discussion in this group about WHY it does it. One story is that the lithium battery is bad; another story is that the software does a restart after several (3?) minutes of inactivity.

I wonder what the real reason is?? Does anyone really know? If it is the battery, then how can it stay in the KISS mode, instead of doing a complete reset as in the RESET command?

Is it possible to determine the condition of the battery with a volt-meter?

Anyone have any thoughts on these matters?

Regards,
Don McGee KF6CJ

678. NAFTA DEBATE

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-09 20:01:47 UTC
From: bap@mace.cc.purdue.edu
Message-ID: <CG8qB0.43L@mentor.cc.purdue.edu>
Source record: 51216

Do any readers of this group know where on the radio
the NAFTA debate will be tonight?

679. Re: broadcasting

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-09 20:32:44 UTC
From: P06288@email.mot.com
Message-ID: <1993Nov9.203244.20263@schbbs.mot.com>
Source record: 51218

In article <2bmmso$nc4@organpipe.uug.arizona.edu>, todd@goat.geo.arizona.edu (todd) says:
>
>what sort of equiptment do i need in order to broadcast on an AM or FM
>frequency.-sorry if this is the wrong BBS.
>todd

2 Choices - Legally or illegally?

Radio Shack has most of what you need and can give you several levels of capability. I don't think AM is an option but FM wireless mic's do fine. Make sure you are legal, the FCC frown's on illegal operation.

73

680. Re: KPC-3 vs. PK-232??????????HELP!

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-09 22:38:12 UTC
From: msanders@sim.es.com
Message-ID: <msanders-091193153812@msanders.sim.es.com>
Source record: 51217

In article <1993Nov7.232611.1@aurora.alaska.edu>, fsrla@aurora.alaska.edu
wrote:

> Hello!!!!!!
> I'm quite new and was wondering what the difference
> is between the KPC-3 and the PK-232...Judging from
> price there must be some.
> What modes do these support?
> Please email me with info!!!!!!!!!!

Roger:

Check the summer 93 catalog from AES, page 49 for descriptions of the two
TNCs above, as well as others, plus p 50-51 for the hottest new stuff.

Milt
--
==========

Opinions, thoughts, &cetera are my own (when I can remember them).

"He flies the sky KB7MSF
Like an Eagle in the eye Amateur Radio
of a hurricane that's abandoned." "Sandman"
Utah
America

681. Re: baycom14e

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-10 03:02:21 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1993Nov10.030221.20642@ke4zv.atl.ga.us>
Source record: 51220

In article <CG88ID.67s@cmptrc.lonestar.org> mitch@cmptrc.lonestar.org (Mitch Veenstra) writes:
>I just recently downloaded a shareware version of Baycom 14e. I plan on
>using it with a 1200 baud modem I have at the shack. What I need is advice
>on making up a cable to go between the modem and my kenwood th25at handheld.
>Can anyone help me?

Don't forget that your 1200 baud modem must be Bell 202, not the Bell
212 of common phone modems. Also, the modem needs to be "dumb", Baycom
doesn't know how to talk to an "AT" command set modem. Tell us what
the modem is, and we may be able to help with wiring.

Gary

--
Gary Coffman KE4ZV |"If 10% is good enough | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | for Jesus, it's good | uunet!rsiatl!ke4zv!gary
534 Shannon Way | enough for Uncle Sam."| emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -Ray Stevens |

682. Where do you get modem chips TCM3105 and Am7910?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-10 05:01:00 UTC
From: rw3aj@glas.apc.ORG
Message-ID: <m0owzFQ-0001IJN@glas.apc.org>
Source record: 51219

Hi anybody!

Where do you get the packet modem chips TCM3105 and Am7910?
How price in the USA or EU? Answer E-mail please!

Many TNX and 73 RW3AJ Serge Filimoshkin
E-mail rw3aj@glas.apc.org
FIDO 2:5020/63.7

683. Beginner in HF packet

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-10 05:07:25 UTC
From: at548@yfn.ysu.edu
Message-ID: <2bpsud$ies@news.ysu.edu>
Source record: 51221

I wo will appreciate some info from someone experienced in HF packet
work.
First, what are the "usual"
frequencies where packet traffic is handled on the 40, 20, 10-meter bands?
Second - How does sa a ham generally make contact.....does he call out
a CQ with a "Connect CQ" on his computer...or is it done this way??
Third - Is there some pub or doc or infofile which "describes" the shot
shorthand type of zb abbreviations that I see in the pcket messages ?
Last - I assume that all I see on the screen are the msgs. between the
stations, but most of the time I see only a "listing of say, one station
to another, but little message content. Is this the usual situation ??

As one can see, I'm a mere beginner and would like to learn more. Any com-
ments will be most welcome.................Dave
--

684. R.D.S (Radio Data System) Help ...

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-10 06:23:08 UTC
From: PAPOUTSI%GRPATVX1.BITNET@FRMOP11.CNUSC.FR
Message-ID: <199311100028.QAA12166@ucsd.edu>
Source record: 51222

I am studying Computer Science and i have a project about RDS (Radio Data
System). I want to build an RDS encoder but i cannot find information.
I need desparately any Info about this subject.
If anyone knows anything about it please send me e-mail (directly or not).

-Kostas Papoutsis

e-mail:

INTERNET: papoutsi@leon.cti.gr
papoytsi@galileos.cti.gr

BITNET: PAPOUTSI@GRPATVX1

685. Re: baycom14e

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-10 14:47:38 UTC
From: bat@gdstech.GRUMMAN.COM
Message-ID: <BAT.93Nov10094738@gdstech.GRUMMAN.COM>
Source record: 51223

The Baycom 14e was full of bugs; it would lock up a lot. Also, there
is a version with the Help menu all in German, and another in
English. But you rally SHOULD get a BAycom TNC, the amount
of time you spend trying to convert a regular modem will be more
than just buying a real one. If you get the Baycom package from
PacCom, it comes with the new Vwr 1.5 software (very nice), a
little TNC, and a full manual. I highly recommend this route.
--
--
* Pat Masterson D12-25 | KE2LJ@KC2FD *
* Grumman Data Systems | 516-346-6316. *
* Bethpage, NY 11746 | bat@gdstech.grumman.com *

686. KISS reset problem

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-10 15:34:31 UTC
From: ecudhm@eds.ericsson.se
Message-ID: <1993Nov10.173431.1@eds.ericsson.se>
Source record: 51225

I have it reasonably good authority that the most recent version of firmware (Ver. 1.2.9) for the MFJ 1270 solves the spontaneous reset problem.

687. BPQ - Ethernet Support?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-10 15:38:10 UTC
From: kf5mg@vnet.ibm.com
Message-ID: <CGA8rq.15Gz@hawnews.watson.ibm.com>
Source record: 51224

Has anyone played with the new (sort of new) Ethernet support that comes with the BPQ 406 code? I want to find a way that will let my set up a BBS (either FBB or 4RE) and make it accessible via JNOS on a lan. I know that I can set up JNOS, BPQ, and a BBS on the same machine, but I'd like to know if I can eliminate the JNOS part and use just a BBS and the BPQ code. Besides the Ethernet Support, the BPQ code has an IP router. Does anyone know if you can route stuff to TCP/IP users on a lan or does it work for radio ports only? Any info on using BPQ on an Ethernet Lan would be appreciated.

73's de Jack - kf5mg
AX25net - kf5mg@kf5mg.#dfw.tx.usa.na - (817) 962-4409
Internet - kf5mg@kf5mg.ampr.org - 44.28.0.14
Worknet - kf5mg@vnet.ibm.com

688. Re: KISS reset (more ques

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-10 16:33:00 UTC
From: steve.jones@canrem.com
Message-ID: <60.1427.5731.0N18A3E1@canrem.com>
Source record: 51230

> The MFJ 1270 seems to periodically reset itself (actually, it RESTARTs with
> default settings for persist, txdelay, etc., but stays in KISS mode).
>
> There has been some discussion in this group about WHY it does it. One stor
> is that the lithium battery is bad; another story is that the software does
> a restart after several (3?) minutes of inactivity.
>

I don't think it's either of those. My TNC's have done this right from
the beginning so it's not a low battery. According to the advice I got
from one TAPR fellow, a software restart was put in the code to keep KISS
mode from locking up. Unfortunately that means that your NOS provided
parameters get wiped out every 3 minutes. It was suggested to run a KISS
only EEPROM or TAPR 1.1.7b/1.1.8a. Not too sure what I'll do with my
1278 though. Guess I'm stuck with the reset.
Steve

* JABBER v1.1 * Beam me up Scotty.

689. Re: baycom14e

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-10 17:24:51 UTC
From: jeffj@cbnewsm.cb.att.com
Message-ID: <CGADpM.ELu@cbnewsm.cb.att.com>
Source record: 51226

In article <BAT.93Nov10094738@gdstech.GRUMMAN.COM> bat@gdstech.GRUMMAN.COM (Pat Masterson) writes:
> The Baycom 14e was full of bugs; it would lock up a lot. Also, there
>is a version with the Help menu all in German, and another in
>English. But you rally SHOULD get a BAycom TNC, the amount
>of time you spend trying to convert a regular modem will be more
>than just buying a real one. If you get the Baycom package from
>PacCom, it comes with the new Vwr 1.5 software (very nice), a
>little TNC, and a full manual. I highly recommend this route.

Another route is to get a Baycom modem from Tigertronics for $49. I had one and it worked really well. It's already assembled and attaches right to your serial port. Nice little unit! 73!

Jeff

--
Jeff Jones AB6MB | OPPOSE THE NORTH AMERICAN FREE TRADE AGREEMENT!
jeffj@seeker.mystic.com | Canada/USA Free Trade cost Canada 400,000 jobs.
Infolinc BBS 510-778-5929 | Want to guess how many we'll lose to Mexico?

690. Re: baycom14e

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-10 20:20:43 UTC
From: mac20@merhaba.cc.columbia.edu
Message-ID: <2brier$mhg@apakabar.cc.columbia.edu>
Source record: 51228

The Baycom from Tigertronics is a great deal, better yet if you can get 10
people or more together and get $10 off _each one_.
We did that here at Columbia University (W2AEE)
a great way to get on packet for $39

Mike Cecere
KF2NV
Applied Physics Department
Columbia University

691. Re: Unicode Adoption (Re: RTTY v. AMTOR v. PACTOR -- dumb question)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-10 21:09:25 UTC
From: jvp@tools1.ee.iastate.edu
Message-ID: <jvp.752965765@tools1.ee.iastate.edu>
Source record: 51229

In <2blop5$fbo@crchh941.bnr.ca> kharker@bnr.ca (Kenneth E. Harker) writes:

> Well, the big problem with a move to unicode from ascii (as opposed to the
>move to ascii from baudot, et al) is that while baudot and friends were 5
>bit encodings, ascii was a 7 bit encoding - not a whole lot bigger. Well, now we
>have ascii at 7 bits, and the next step is unicode, which is 32 bits. Over four
^^^^^^^^^^^^^^^^

Are you sure about this? I thought it was 16 bits.

>times as much information needs to be trasmitted to put up the same character now.
> Which of course makes things slower/less reliable/more complex, etc... Which
>isn't to say that it's impossible - but it would be a big leap.

Not necessarily. I'm no unicode expert, but I believe the ascii character
set is a subset of unicode. So when transmitting ascii text, it's unicode
compliant. Some of the 8th bit codes (Ascii beyond 127) define that a second
byte is present to define the character. So only those characters that need
the extra byte will send the extra byte.

I don't see why any modifications would be needed to today's system to
be able to handle unicode. Just so both sides of the connection are both
speaking it.

+---+
| Jim Van Peursem - Ph.D. Student - Ham Radio -> KE0PH |
| Department of Electrical Engineering and Computer Engineering |
| Iowa State University - Ames, IA 50011 |
| internet - jvp@iastate.edu -or- jvp@cpre1.ee.iastate.edu |
+---+
--
Jim Van Peursem - Dept of EE and CprE - Iowa State University
Ames, IA 50011 - internet: jvp@iastate or tools1.ee.iastate.edu
Just say no to Clinton's health care plan - we can't afford it

692. Re: Recommendations for RFI quiet PCs and a TNC

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-10 21:44:10 UTC
From: bcoleman@hayes.com
Message-ID: <8399.2ce1286a@hayes.com>
Source record: 51231

In article <0097501734126640.24605416@drager.com>, landisj@drager.com (Joe Landis - Systems/Network Mgr. - x2621) writes:
> I'm in the market for a PC. Need to get something for working at home, and I
> thought I'd try to combine a little business with pleasure. So the computer
> will be in the shack, next to the rig. I've been looking
> at various 486 25mhz boxes, including Compaq, Laser, and Packard Bell.
> Are there any that are notoriously bad radiators of RFI?

The best shielded personal computers are probably those made by Apple. You know, those Macintosh computers. The ones that do more, cost less and pay now. <grin>

Seriously, you should consider one if it fits your application. They really are some of the best sheilded computers around.

--
Bill Coleman, AA4LR ! CIS: 76067,2327 AppleLink: D1958
Principal Software Engineer ! Packet Radio: AA4LR @ W4QO
Hayes Microcomputer Products, Inc. ! UUCP: uunet!hayes!bcoleman
POB 105203 Atlanta, GA 30348 USA ! Internet: bcoleman%hayes@uunet.uu.net
Disclaimer: "My employer doesn't pay me to have opinions."
Quote: "The same light shines on vineyards that makes deserts." -Steve Hackett.

693. Re: Kiss AX25 driver for Unix ???

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-10 22:35:45 UTC
From: peter@globv1.hacktic.nl
Message-ID: <1993Nov10.223545.1490@globv1.hacktic.nl>
Source record: 51233

mime@dk3hg.hanse.de (Michael Meifert) writes:

>what is the "HAM channel on the Linux mailing list" ?

Ever heard of linux-activists? It's a mailing list that exists only slightly
less long as Linux is publicly available (almost 2 years now). The mailing
list software used allows different subjects to coexist on the same mailing
list in the form of channels. The HAM channel is one of them, devoted to the
combination of Linux and HAM stuff. Originally some messages concerning running
KA9Q on Linux were "posted" there. The message to which Fred replied was the
first message in many months (and you can also see it in Fred's reaction :).
So you don't miss much if you don't have it.

Groetjes,
Peter Busser
--
Linux, the choice of a GNU generation.

694. Re: BPQ - Ethernet Support?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-11 00:02:19 UTC
From: jt63597@ee.tut.fi
Message-ID: <JT63597.93Nov11000219@voltti.ee.tut.fi>
Source record: 51232

kf5mg@vnet.ibm.com (Jack Snodgrass) writes:

> know that I can set up JNOS, BPQ, and a BBS on the same machine, but I'd
> like to know if I can eliminate the JNOS part and use just a BBS and the
> BPQ code. Besides the Ethernet Support, the BPQ code has an IP router.
> Does anyone know if you can route stuff to TCP/IP users on a lan or does it
> work for radio ports only? Any info on using BPQ on an Ethernet Lan would
> be appreciated.

I just looked the jnos110x13's source and found out that in that versio there
is a full BPQ support. But that's not the question that you asked...

73 de Vesa OH3NWQ
--
--Disclaimer:--Tampere-a-place-in-Finland-where-everything-gets-tampered-with--
internet: oh3nwq@nic.funet.fi
packet: OH3NWQ@OH3RBR.#TRE.FIN.EU communicator # + 358 49 734 094

695. What is difference between KPC-3 and MFJ 1270?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-11 16:30:01 UTC
From: rossi@VFL.Paramax.COM
Message-ID: <1993Nov11.163001.2047@VFL.Paramax.COM>
Source record: 51236

I am looking for a cheap VHF packet TNC. Several people recommended the
MFJ 1270. I decided to get one but it seems that the current "B" version
has sold out and MFJ will not be shipping the newer "C" version that they
are advertising until mid-December.

Best I can tell the Kantronics KPC-3 seems to be similar in features and price,
however, do not have as detailed information about the KPC-3.

I am looking for more detailed information on what the differences are between
these two TNCs. Is the KPC-3 fully TAPR TNC-2 compatible? None of the KPC-3
info says anything about this, however the MFJ adds seem to emphasize this.

Trying to decide if I should just wait 5-6 weeks for the MFJ 1270C to come
out or get a KPC-3 now.

I plan to use the TNC with a dumb terminal at first and eventually develop
some custom interface software.

==
Pete Rossi - WA3NNA rossi@vfl.paramax.COM

Unisys Corporation - Government Systems Group
Valley Forge Engineering Center - Paoli, Pennsylvania
==

696. Internet to Packet gateway?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-11 16:33:56 UTC
From: dfrey@bigbird.csd.scarolina.edu
Message-ID: <2btphk$b02@bigbird.csd.scarolina.edu>
Source record: 51234

My brother (with no Internet link) has just gotten into packet. Is there any way for us to communicate through a gateway of some sort? I seem to remember reading about such a thing, but don't remember the details.

Thanks for any info.

73
David, AD4HM

697. MAKE.MONEY.FAST

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-11 16:34:01 UTC
From: jangus@skyld.tele.com
Message-ID: <753035641snx@skyld.tele.com>
Source record: 51142

In article <93312.210451KRT105@psuvm.psu.edu> KRT105@psuvm.psu.edu writes:

>
> Dear Friend,
>
> My name is Dave Rhodes. In September 1988 my car was repossessed and the

[snip]

> Hi. Now I'm number 10 and I sure hope this works, I'll be graduating in May
> 1994 and I sure could use a little cash. I included my telephone number with
> my address above -- when I reach #1 on your list, give me a call and I'll
> honestly let you know how it's going. Good luck to everyone!
> -- Kevin Trigger

This worthless bag of excrement needs to be taken out behind the network and
beat to death with a pile of printouts.

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "It is difficult to imagine our
Internet: jangus@skyld.tele.com | universe run by a single omni-
US Mail: PO Box 4425 Carson, CA 90749 | potent god. I see it more as a
Phone: 1 (310) 324-6080 | badly run corporation."

698. Wanted: Pinouts for Alinco HT for Packet

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-11 16:40:34 UTC
From: msanders@sim.es.com
Message-ID: <msanders-111193094034@msanders.sim.es.com>
Source record: 51235

I just purchased a TNC last night and was trying to find out how to hook it to my DJ-180T Alinco HT. My two other rigs have the required data in their manuals, but the Alinco HT does not. Does anyone have the data/circuit necessary for the external mic connections to hook up to packet? I will publish any replies plus my successful connection diagram when it gets done.

Thanks in advance

Milt
msanders@sim.es.com

--
==========

Opinions, thoughts, &cetera are my own (when I can remember them).

"He flies the sky KB7MSF/AG
Like an Eagle in the eye
of a hurricane that's abandoned." "Sandman"
Utah
America

699. Re: Wanted: Pinouts for Alinco HT for Packet

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-11 18:41:03 UTC
From: msanders@sim.es.com
Message-ID: <msanders-111193114103@msanders.sim.es.com>
Source record: 51238

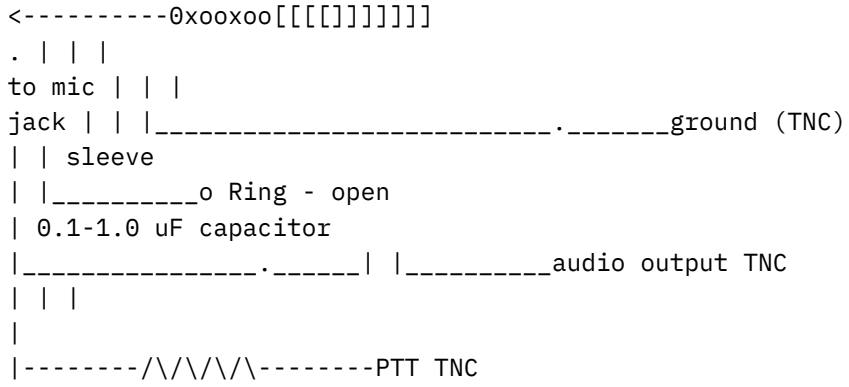
In article <msanders-111193094034@msanders.sim.es.com>, msanders@sim.es.com (Milt Sanders) wrote:

> I just purchased a TNC last night and was trying to find out how to hook it
> to my DJ-180T Alinco HT. My two other rigs have the required data in their
> manuals, but the Alinco HT does not. Does anyone have the data/circuit
> necessary for the external mic connections to hook up to packet? I will
> publish any replies plus my successful connection diagram when it gets
> done.
>
> Thanks in advance
>

Just got FAX back from Alinco: nice service: about 1 hour and in hard copy!

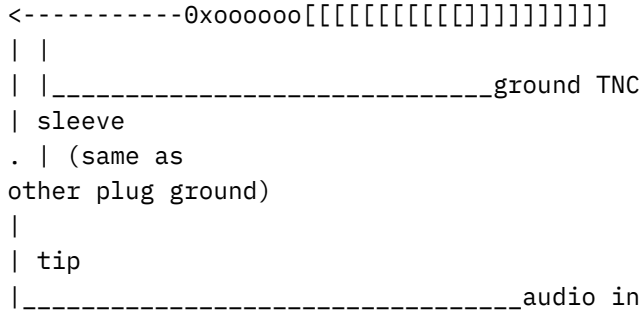
Alinco DJ-180T Packet Connection

2.5mm stereo plug



. 4.7-33K ohm resistor

3.5mm mono plug



2.5mm stereo plug into mic jack
Tip to TNC audio output through 0.1 to 1.o microfarad capacitor

with parallel resistor 4.7 to 33K ohm to PTT switch
Ring open
Sleeve to TNC ground

3.5mm mono plug
tip to TNC audio input
sleeve to TNC ground (same ground as other plug)

Data received as FAX from Alinco this morning (11 NOv 93)

Sorry about the graphics, so much for ASCII

Milt

700. Re: BPQ - Ethernet Support?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-11 19:03:01 UTC
From: dave@llondel.demon.co.uk
Message-ID: <753069781snx@llondel.demon.co.uk>
Source record: 51239

In article <CGA8rq.15Gz@hawnews.watson.ibm.com> kf5mg@vnet.ibm.com (Jack Snodgrass) writes:
> Has anyone played with the new (sort of new) Ethernet support that
>comes with the BPQ 406 code? I want to find a way that will let my set up
>a BBS (either FBB or 4RE) and make it accessible via JNOS on a lan. I
>know that I can set up JNOS, BPQ, and a BBS on the same machine, but I'd
>like to know if I can eliminate the JNOS part and use just a BBS and the
>BPQ code. Besides the Ethernet Support, the BPQ code has an IP router.
>Does anyone know if you can route stuff to TCP/IP users on a lan or does it
>work for radio ports only? Any info on using BPQ on an Ethernet Lan would
>be appreciated.
>
As it stands, BPQ will only talk to another BPQ node over ethernet. I solve it here by running BPQ on both machines here, although as both run WNOS as well, I could the TCP/IP stuff to talk 'direct' in parallel with the BPQ (and have done so in the past). One of the machines also runs the IP router, but it can only pass stuff on the ethernet in BPQ-speak. I daresay someone could write a suitable application to do what you want.

Dave
--

****
* G4WRW @ GB7WRW.#41.GBR.EU AX25 * Start at the beginning. Go on *
* dave@llondel.demon.co.uk Internet * until the end. Then stop. *
* g4wrw@g4wrw.ampr.org Amprnet * (the king to the white rabbit) *
****

701. Re: What is difference between KPC-3 and MFJ 1270?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-11 21:13:27 UTC
From: miltonm@austin.ibm.com
Message-ID: <CGCIyF.1pLC@austin.ibm.com>
Source record: 51237

Haven't seen the adds for 1270C, but I have a 1270B. Key differences:

1. MFJ has Modem disconnect header and a SIO chip, allowing upgrades to
9600 (and inbetween), 56,000 with firmware changes. KPC3 does
HDLC in software.

2. MFJ includes 300 baud modem (no tuning indicator installed on 1270B),
KPC3 is 1200 baud only.

3. MFJ draws ~270ma@12V, KPC3 ~40?ma on a 9V battery (I have heard
2 months on an alkline with leds off, 2 weeks with leds on)

If you don't care about other speeds (just VHF 1200 Baud is ok), and/or
you want portable operation (laptop, etc) then KPC3 is the choice.

If you might upgrade to 9600 (or 2400 or 4800), then MFJ is the way to go.

Disclaimer: I have seen and heard about KPC3, I don't own one myself.
I will probably get it for my next one because I want to set up a portable
station.

milton
--
Milton Miller KB5TKF miltonm@austin.ibm.com
I don't speak for IBM.

702. Re: Internet to Packet gateway?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-11 22:48:15 UTC
From: david@stat.com
Message-ID: <57gVcc1w165w@stat.com>
Source record: 51144

How to Use the WB7TPY
Packet <-> Internet Gateway

First, some brief operational notes:

(1) Messages must not contain any foul language, or commercial purpose.
(2) Messages can only be sent to countries that the United States has
a third-party agreement. All others will be destroyed.
(3) Messages from the internet should be less then 5K in length.
No files should be sent.
(4) If you have questions, please do not hesitate to contact me either on
packet radio: WB7TPY@WB7TPY.AZ.USA.NA -or-
Internet : david@stat.com -or-
Fidonet : David Dodell @ 1:114/15

(5) Have fun. Use the gateway as much as you like. That is what it is
there for.

From Internet to Packet

Send mail to the internet address of:

gate@wb7tpy.ampr.org

The first line of text must contain a full packet address, preceded with the
word "Packet:"

For example, mail to my packet address, would have the first line of text;

Packet: wb7tpy@wb7tpy.az.usa.na

From Packet to Internet

Send as private mail (never a bulletin) to the packet address of:

gate@wb7tpy.az.usa.na

The first line of text must contain a full domained internet address,
proceeded with the word "Internet:"

For example, mail to my internet address, would have the first line of text;

Internet: david@stat.com

Internet: david@stat.com FAX: +1 (602) 451-6135
Bitnet: ATW1H@ASUACAD FidoNet=> 1:114/15
Amateur Packet ax25: wb7tpy@wb7tpy.az.usa.na

703. Packet BBS spec by ARRL

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-12 01:24:15 UTC
From: enge@enge.almaden.ibm.com
Message-ID: <2buojv$kr9@juniper.almaden.ibm.com>
Source record: 51143

I received a copy of a "Final Draft" specification on packet BBS forwarding from the ARRL. Anyone know who the author is or how to submit comments?

Roy Engehausen, AA4RE
enge@almaden.ibm.com

704. CoCo2 for packet

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-12 06:53:11 UTC
From: ncc2001@cwis.unomaha.edu
Message-ID: <1993Nov12.065311.19413@news.unomaha.edu>
Source record: 51140

```
73 de N0YBC Michael

--
| Michael Fortner N0YBC | Where are we going? |
| Internet: ncc2001@cwis.unomaha.edu | PLANET 10! |
| Packet: N0YBC@WB0BLR.#SWIA.IA.USA.NA | When? |
| | REAL SOON! |
```

705. PC Soundcard decoding?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-12 07:49:42 UTC
From: jdubin@jdubin.hughes.american.edu
Message-ID: <jdubin.33.0@jdubin.hughes.american.edu>
Source record: 51141

Hello all...

I'm a PC user looking for some programs which will decode Morse/RTTY/
Slowscan/_____Fax/etc. using a Soundblaster (actually, I'm using a Gravis
Ultra Sound) or other soundcard (one which doesnot have an onboard DSP).
So far, I've found FFTMORSE (that sounds right...) which will do Morse Code
decoding, but I haven't seen anything similar yet.

Does anyone have anything of the sort, or maybe has experimented with the
like? I'd think that buying a used soundblaster for $35 or so would be a
great alternative to using the homebrew interfaces for HamComm/JVFax.

If you've got info, please either post here or mail to jdubin@american.edu

Thanks!

Jeff Dubin
jdubin@american.edu

(PS- don't reply to this post... it WILL bounce. Thanks!)

706. Re: What is difference between KPC-3 and MFJ 1270?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-12 13:13:20 UTC
From: jms@col.hp.com
Message-ID: <2c025h$gjf@hp-col.col.hp.com>
Source record: 51145

Milton Miller (miltonm@austin.ibm.com) wrote:

: Haven't seen the adds for 1270C, but I have a 1270B. Key differences:

: 1. MFJ has Modem disconnect header and a SIO chip, allowing upgrades to
: 9600 (and inbetween), 56,000 with firmware changes. KPC3 does
: HDLC in software.

: 2. MFJ includes 300 baud modem (no tuning indicator installed on 1270B),
: KPC3 is 1200 baud only.
According to my KPC-3 manual, the KPC-3 supports 300, 400, 600 or 1200
baud over the radio link. (See HBaud).

: 3. MFJ draws ~270ma@12V, KPC3 ~40?ma on a 9V battery (I have heard
: 2 months on an alkline with leds off, 2 weeks with leds on)
I've measured mine at around 17 mA, with leds on.

Mike, K0TER

707. Re: Where do you get modem chips TCM3105 and Am7910?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-12 14:21:54 UTC
From: bobc@lsid.hp.com
Message-ID: <CGDuKI.3Gt@hpcvsnz.cv.hp.com>
Source record: 51146

I just ordered (and received) several of the TCM3105 parts from
JDR Microdevices. They were $6.95 each. That's the good news.
The bad news is that they don't carry a 4.43361 MHz crystal. I
had to order that from Mouser.

JDR can be reached at 1-800-538-5000 (US). For international orders
use (408) 559-1200.

73

Bob Cutler
KE7ZJ
bobc@lsid.hp.com

708. Beginner in packet

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-12 14:57:23 UTC
From: joec@fid.morgan.com
Message-ID: <1993Nov12.145723.27876@fid.morgan.com>
Source record: 51147

In article <BAT.93Nov10094738@gdstech.GRUMMAN.COM> bat@gdstech.GRUMMAN.COM (Pat Masterson) writes:
>The Baycom 14e was full of bugs; it would lock up a lot. Also, there
>is a version with the Help menu all in German, and another in
>English. But you rally SHOULD get a BAycom TNC, the amount
>of time you spend trying to convert a regular modem will be more
>than just buying a real one. If you get the Baycom package from
>PacCom, it comes with the new Vwr 1.5 software (very nice), a
>little TNC, and a full manual. I highly recommend this route.

I have a Sony 2010 receiver and I would like to connect that to
my 386 pc and some packet s/w, just to experiment with. My PC
has a Hayes modem (AT compatible) and two com ports, one for the
modem and the other for the mouse.

Is it doable? What s/w or h/w would I need to get started, just
for receiving right now?

Thanks in advance,

Joe
joec@morgan.com

709. Re: Where do you get modem chips TCM3105 and Am7910?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-12 15:44:27 UTC
From: glenne@sad.hp.com
Message-ID: <CGDyE4.Exs@srgenprp.sr.hp.com>
Source record: 51148

Bob Cutler (bobc@lsid.hp.com) wrote:
: I just ordered (and received) several of the TCM3105 parts from
: JDR Microdevices. They were $6.95 each. That's the good news.
: The bad news is that they don't carry a 4.43361 MHz crystal. I
: had to order that from Mouser.

Digikey has 4.43361 MHz crystals for $1.37 in single quantity, 91 cents if you buy a hundred (:>)

Glenn Elmore n6gn

ax.25 n6gn@wx3k.#nocal.ca.usa.na
amateur IP: glenn@SantaRosa.ampr.org
Internet: glenne@sr.hp.com

710. Re: Packet BBS spec by ARRL

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-12 20:25:04 UTC
From: pme@gaia.electrum.kth.se
Message-ID: <PME.93Nov12212504@gaia.electrum.kth.se>
Source record: 51149

Where do i find that one ? Is it public or what ?
/Peter, SM0OHI

711. Searching info

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-12 21:11:15 UTC
From: bento@eig.unige.ch
Message-ID: <1993Nov12.231115.1@eig.unige.ch>
Source record: 51166

Hi all,

I'm searching for a store in Canada who sells the

RCI 2900 TURBO

For a friend of mine. If there is somebody who Leaves on
Canada and knows something about, i'd like that he sends me a
mail with their FAX Number.

Many tankx from

Joao Bento

Email: bento@eig.unige.ch

712. Software for Mac wanted

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-13 00:31:33 UTC
From: Larry KE6ARX <larry.jenkins@cl_2743.chinalake.navy.mil>
Message-ID: <CGEMsL.292@avalon.chinalake.navy.mil>
Source record: 51150

Is there any software for the Macintosh out there for Ham radio? Where
can I find it?

713. Re: Packet BBS spec by ARRL

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-13 02:36:18 UTC
From: jbloom@arrl.org
Message-ID: <2607@arrl.org>
Source record: 51153

In rec.radio.amateur.digital.misc, enge@enge.almaden.ibm.com writes:
>I received a copy of a "Final Draft" specification on packet BBS
>forwarding from the ARRL. Anyone know who the author is or how to
>submit comments?

This document was sent to BBS authors, TNC manufacturers (who are,
typically, also providing BBS functions) etc. It is from the ARRL
Digital Committee, and was prepared with the participation of many
of the folks actively writing BBS software. Comments may be sent
to the ARRL Digital Committee, 225 Main St., Newington, CT 06111.

Once the spec has been hacked at by the BBS gurus I expect it will
be made available to the general public for comment.

Jon Bloom, KE3Z | jbloom@arrl.org
American Radio Relay League |
225 Main St., Newington CT 06111 |

714. Packet antenna?????

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-13 05:55:55 UTC
From: fsrla@aurora.alaska.edu
Message-ID: <1993Nov12.205555.1@aurora.alaska.edu>
Source record: 51151

What would a good 2m packet antenna
be??? I'm not using packet right
now, but hope to soon. However,
all I have up right now is a
2 element quad. Is this to weak?
What should I try??????
Thanks for the help!!!!!!!

Roger Asbury WL7NT
FSRLA@AURORA.ALASKA.EDU

715. Where Can I Get Lan-Link

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-13 06:32:19 UTC
From: AllanWS@cup.portal.com
Message-ID: <95663@cup.portal.com>
Source record: 51152

Does anyone have a lead as to where I may be able to grab the latest evaluation version of Lan-Link. The version I have is 2.00e and it has some serious bugs in it. I was hoping most of the bugs have been cleaned up before I consider registering.
Thanks!

Al Schlaugat / allanws@cup.portal.com \ Amateur Radio: N9ISN

716. Re: broadcasting

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-13 11:39:47 UTC
From: arog@BIX.com
Message-ID: <arog.753190787@BIX.com>
Source record: 51154

todd@goat.geo.arizona.edu (todd) writes:

>what sort of equiptment do i need in order to broadcast on an AM or FM
>frequency.-sorry if this is the wrong BBS.
>todd

The first things that you need are one of the following:

1./ A part 47 CFR 73 FCC license,
2./ A copy of part 47 CFR 15 (low power and limited
radiation devices,
3./ Lots of Money to pay the forfitures with.

alan

717. Re: Packet antenna?????

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-13 13:35:14 UTC
From: aa963@Freenet.carleton.ca
Message-ID: <CGFn2q.9DH@freenet.carleton.ca>
Source record: 51155

In a previous article, fsrla@aurora.alaska.edu () says:

>What would a good 2m packet antenna
>be??? I'm not using packet right
>now, but hope to soon. However,
>all I have up right now is a
>2 element quad. Is this to weak?
>What should I try??????
>Thanks for the help!!!!!!!
>--------------------------------
>Roger Asbury WL7NT
>FSRLA@AURORA.ALASKA.EDU
>
Anything will work. I use a Ringo Ranger vertical. If you're
quite a distance away from your main feed, you could use
a yagi.
>
--
'86 Virago 1100 ---- My Amazon ... DoD # - 814
aa963@freenet.carleton.ca | carr@uranus.dgrc.doc.ca
ve3fhc@ve3osq#eon.on.can.na
Lloyd Carr --- Munster ON

718. TNC-2 assistance request

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-13 19:05:06 UTC
From: kkrallis@leon.nrcps.ARiadne-t.GR
Message-ID: <9311131905.AA05123@leon.nrcps.ariadne-t.gr>
Source record: 51157

Hello again,
I am trying to run TheNet X-1j on a TNC clone I was given recently
without documnetattion. According to the TheNet docs, pin 23 of the
computer port should be connected to pin 10 in order to switch to
crosslink or KISS mode. As these pins are not connected on my TNC,
does anybody know at which point of the circuit they are normally
conected on the standard TAPR TNC-2 design?

73 Costas SV1XV
E-Mail: <kkrallis@leon.nrcps.ariadne-t.gr>

719. Question about GLB FirmWare

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-13 20:57:32 UTC
From: colla@burzaco.satlink.net
Message-ID: <gate.LaFZcc1w165w@burzaco.satlink.net>
Source record: 51163

I'm the proud keeper of a GLB TNC on a lifetime loan; this TNC is a Z80 based all software device (no encoder-decoder, ACIA chip, anything).

It's fairly obsolete by now, but I wonder if there are some firmware available at a higher level than let me add some functions over the ones I have by now, mine's level is 2.10A.

Word from somebody with info or ideas about what to do which this piece of museum would be certainly very welcomed.

Thanks in advance.

Ing.Pedro E. Colla - Mail:colla@burzaco.satlink.net - Buenos Aires - Argentina

720. Baycom software V 1.5? 1.4?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-14 00:34:02 UTC
From: genew@teleport.com
Message-ID: <2c3udq$eli@kelly.teleport.com>
Source record: 51160

The Baycom packet modem I got from Tigertronics came with V 1.4, is a 1.5 upgrade really worthwhile?

73's
Gene
KB7WIP

--
Robert: This .sig's for you!
No doubt the baboon could be trained to effectively operate a telegraph key, leaving himself sufficient unused brain power and manual dexterity to simultaneously send Morse, chew gum, and play with himself!

721. Re: Software for Mac wanted

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-14 02:22:42 UTC
From: wy1z@bach.coe.northeastern.edu
Message-ID: <WY1Z.93Nov13212243@bach.coe.northeastern.edu>
Source record: 51162

In article <CGEMsL.292@avalon.chinalake.navy.mil> Larry KE6ARX
<larry.jenkins@cl_2743.chinalake.navy.mil> writes:

Newsgroups: rec.radio.amateur.digital.misc
Path: lynx!noc.near.net!nic.umass.edu!caen!sdd.hp.com!cs.utexas.edu!uwm.edu!spool.mu.edu!a
gate!overload.lbl.gov!dog.ee.lbl.gov!newshub.nosc.mil!avalon.chinalake.navy.mil!jenksmac.c
hinalake.navy.mil!larry.jenkins
From: Larry KE6ARX <larry.jenkins@cl_2743.chinalake.navy.mil>
X-Xxmessage-Id: <A9096B97EE010213@jenksmac.chinalake.navy.mil>
X-Xxdate: Fri, 12 Nov 93 16:34:31 GMT
Sender: usenet@avalon.chinalake.navy.mil (NAWS news admin)
Organization: NAWC-WD
X-Useragent: Nuntius v1.1.1d17
Date: Sat, 13 Nov 1993 00:31:33 GMT
Lines: 2

Is there any software for the Macintosh out there for Ham radio? Where
can I find it?

Check the archives at world.std.com in /pub/hamradio/mac

If you need any further help, drop me a line!

Scott

--
==
| Scott Ehrlich Internet: wy1z@neu.edu |
Amateur Radio: wy1z AX.25: wy1z@n0ary.#nocal.ca.usa.na
Maintainer of the Boston Amateur Radio Club hamradio FTP area on
the World - world.std.com /pub/hamradio
==

722. Re: Internet to Packet gateway?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-14 02:25:35 UTC
From: wy1z@bach.coe.northeastern.edu
Message-ID: <WY1Z.93Nov13212535@bach.coe.northeastern.edu>
Source record: 51161

In article <2btphk$b02@bigbird.csd.scarolina.edu> dfrey@bigbird.csd.scarolina.edu (David Frey) writes:

Path: lynx!noc.near.net!howland.reston.ans.net!darwin.sura.net!opusc!not-for-mail
From: dfrey@bigbird.csd.scarolina.edu (David Frey)
Newsgroups: rec.radio.amateur.digital.misc
Date: 11 Nov 1993 11:33:56 -0500
Organization: Univ. of South Carolina, Columbia
Lines: 10
Distribution: usa
NNTP-Posting-Host: bigbird.csd.scarolina.edu
Keywords: Packet Internet gateway

My brother (with no Internet link) has just gotten into packet. Is there any
way for us to communicate through a gateway of some sort? I seem to remember
reading about such a thing, but don't remember the details.

Thanks for any info.

73
David, AD4HM

One of the easiest gateways to use (the one I use) is the N0ARY gateway.
For information on it, just send a message to bob@arasmith.com.

73,
Scott

--
```
==============================================================================
| Scott Ehrlich Internet: wy1z@neu.edu |
| Amateur Radio: wy1z AX.25: wy1z@n0ary.#nocal.ca.usa.na |
|------------------------------------------------------------------------------|
| Maintainer of the Boston Amateur Radio Club hamradio FTP area on |
| the World - world.std.com /pub/hamradio |
==============================================================================
```

723. Re: Beginner in packet

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-14 02:51:58 UTC
From: bat@gdstech.GRUMMAN.COM
Message-ID: <BAT.93Nov13215158@gdstech.GRUMMAN.COM>
Source record: 51156

If you are just going to LISTEN to packet stuff, a Baycomm or
Poor Man's Packet is the cheapest way to go. The Hayes modem
that you have is not able to decode packet, you need a packet
modem, called a TNC. This will plug into one of your com ports,
and you tell the software which port to read by setting the
port number in the config file. And, you run audio from your
receiver's audio jack thru the cable to the TNC, where it gets
decoded, and sent into the com port. The software (in this instance)
recontructs the packets, and displays them on your screen. Many of
the more expensive TNCs do the decoding in their own firmware, and
send plain ascii to the computer. In this case you can use any com
software to read them (like procomm).
--
--
* Pat Masterson D12-25 | KE2LJ@KC2FD *
* Grumman Data Systems | 516-346-6316. *
* Bethpage, NY 11746 | bat@gdstech.grumman.com *

724. Re: Packet antenna?????

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-14 03:00:23 UTC
From: bat@gdstech.GRUMMAN.COM
Message-ID: <BAT.93Nov13220023@gdstech.GRUMMAN.COM>
Source record: 51158

Using a directional antenna on packet will give you a better
connection to your remote station, but may very well screw up
the frequency for everyone else. You are creating a "hidden
transmitter"
because staions off to your sides wont be able to hear you
transmit. And, they will probably transmit at the same time
you do, creating a collision in which nobody wins, and lots of
packets have to be resent. The best thing for you to do, is make
yourself be heard by EVERYONE on the frequency, where practical.
Do this by using a high (25 feet or better), omnidirectional
antenna. And, at least 20 watts (no HT's). Too may people live
only a few miles away from their PBBS and can connect on 1 watt with a
ducky. But noone else can hear them, and throughput degrades
remarkably for evryone on the frequency. So, be thoughtful of all
the other people out there, we have to share with everbody.
--
--
* Pat Masterson D12-25 | KE2LJ@KC2FD *
* Grumman Data Systems | 516-346-6316. *
* Bethpage, NY 11746 | bat@gdstech.grumman.com *

725. Re: Baycom software V 1.5? 1.4?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-14 03:03:16 UTC
From: bat@gdstech.GRUMMAN.COM
Message-ID: <BAT.93Nov13220316@gdstech.GRUMMAN.COM>
Source record: 51159

I have used 1.2, 1.4e, and 1.5. The latest release is quite
better. I had numerous lockups with 1.4, and was really annoyed with
it. BTW, the program called GP can run on a Baycom modem. You may want
to give it a try also.
--
--
* Pat Masterson D12-25 | KE2LJ@KC2FD *
* Grumman Data Systems | 516-346-6316. *
* Bethpage, NY 11746 | bat@gdstech.grumman.com *

726. Re: Help on KISS mode

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-14 05:46:41 UTC
From: dreamer@lhaven.UUmh.Ab.Ca
Message-ID: <hjiSt*h9E@lhaven.UUmh.Ab.Ca>
Source record: 51172

In article <1993Nov2.190325.1@eds.ericsson.se>, ecudhm@eds.ericsson.se writes:

> Help!
>
> When I send a KISS packet to my TNC (MFJ 1270B), the TNC waits a random
> amount of time (0 to 6 seconds) before it keys the radio and transmits.
>
> Surely I haven't set some parameter in the TNC. What is it? I want the
> TNC to transmit right away, and I'll handle the timing myself (in software).
>
> Any help would be appreciated. I am also looking for the command set for
> KISS mode, i.e. when the first byte after the first END character is NOT 00.
>
> Thanks, in advance.
>
> Don McGee KF6CJ
> ecudhm@erigate.ericsson.se

This is proper behaviour....

Its call slottime and persistence.

Slottime is the amount of clear (no activity) time the TNC waits, persistence
is the chance that after the expiry of this slottime that it'll transmit.

Assuming NOS of some familiar type....you can probably set the values before
going into KISS mode....

param <int> 2 <val> - changes the persistence.

val is from 0 to 255. The higher the number the more likely that the randomly
generated number will be less than or equal to the persistence value, so it'll
transmit.

param <int> 3 <val> - sets the slottime in 10's of milliseconds.

Other values of interest:

param <int> 1 <val> - sets the TXDelay in 10's of milliseconds.
param <int> 4 <val> - sets the TXTail in 10's of milliseconds.
param <int> 5 0/1 - half/full duplex switch

param <int> 255 - exit KISS mode.

<int> is the name of the KISS interface.

--
"Just a Crazy Engineer with an Amiga and an HP48sx" - The Dreamer

Email: dreamer@lhaven.uumh.ab.ca or "Lawrence Chen" @ 1:134/3002
PHONE: +1 403 526 6019 FAX: +1 403 529 5102 CIS: 74200,2431
Lunatic Haven BBS: +1 403 526 6957 | Packet: @VE6FRM.#HAT.AB.CAN.NA
Praxis Society K12 BBS: +1 403 529 1610 | Callsign: VE6LKC

727. ZL DATA NEWS 07 NOVEMBER 1993

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-14 11:20:44 UTC
From: carl@codewks.nacjack.gen.nz
Message-ID: <01Z2cc1w165w@codewks.nacjack.gen.nz>
Source record: 51165

This newsletter normally gets posted to REC.RADIO.INFO but
unfortunately I was unable to do so this week. Sorry! ZL1UWV @ ZL1AB.

From : ZL1AMW
To : NEWS `NZ
Type/status : BF
Date/time : 06-Nov 23:28
Bid : NWS9311071
Message # : 13161
Title : ZL Data News 7 Nov Page 1
Path: !ZL2WA!ZL1UX!

From: ZL1AMW`ZL1UX.#20.NZL.OC
To : NEWS`NZ

DATA DATA DATA DATA DATA DATA DATA DATA DATA DATA DATA
DATA DATA ..... DATA DATA
DATA DATA . . DATA DATA
--------- . THE WEEKLY NEWSLETTER OF . ---------
NEWS NEWS . THE ZL DATA GROUP . NEWS NEWS
NEWS NEWS ..... NEWS NEWS
NEWS NEWS NEWS NEWS NEWS NEWS NEWS NEWS NEWS NEWS NEWS
----------------- TRANSMITTED BY ZL1AMW --------------
-------------------- H A M I L T O N -----------------
07 November 1993

This is a weekly unofficial bulletin of news and views from ZL
amateurs. It does not represent any official viewpoint, and all
opinions are those of the contributor.

News Transmission
----------------- From ZL1AMW
As mentioned in last weeks news, the Sunday broadcast has been
shifted to 40 metres, on 7045KHz, in place of 80 metres.
At the same time the ZL1AMW SELCAL has also been moved to 40
metres, and to date (after 2 days) the reports seem to support the
shift.
I look forward to receiving reports of better signals as summer
proceeds.
- de ZL1AMW

New Items
--------- from ZL1AMW
This sheet has survived continuously for many years (since 1984 in
fact) by receiving interesting and varied items from a broad range
of amateur operators.

This week, as has happened on a thankfully small number of occasions, no news items have been received at all... so we will definitely have a brief newsletter today! Maybe the lead-up to the elections has been so gripping we have not had time for our hobby? If you have any item that could be of interest to the amateur community, drop it to me by SELCAL, packet (`ZL1UX) or post.

Selcal News Pages
----------------- from ZL1AMW
As noted last week, I have restored the 'news page' facility, where items from this newsletter are extracted each week, and form the contents to the replies to the PAGE command on the ZL1AMW RTTY SELCAL. This has increased the number of users accessing, and seems to be providing a useful service to callers.

STOP PRESS STOP PRESS
--------------------- From ZL1AMW
Reports received after the 9:30am broadcast indicate good signals in the South Island, and very poor, or non-existent signals in Auckland and Tauranga. 40 metre signals improved significantly about 1 hour later for North Island stations.
Any more reports?

That concludes the Data News for this week, this sheet is Prepared at the shack of ZL1AMW from contributions sent by post, RTTY and packet. Text is also obtained from packet BBS stations, and Selcals on 7045/3545khz.
This news is transmitted weekly on Sunday mornings at 0930hrs (local) and repeated at 1900hrs. Both transmissions are on 3545khz. It is first sent in Baudot at 75 baud, then repeated in AMTOR mode B (FEC) on both occasions.
73 to all from Alan, ZL1AMW, 20 Lorne St., Hamilton.

========== End of message #13161 ==========

--
carl@codewks.nacjack.gen.nz (Carl Trommel)
The BBS Works -- +64 9 630 7739 NZL New Zealand's Oldest Laptop Driven BBS

728. Windows NT Packet TCP/IP

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-14 13:49:28 UTC
From: root@ka9qpg.ampr.org
Message-ID: <2c5d18$gg@ka9qpg.ampr.org>
Source record: 51164

Is anyone working on a Windows NT version of AX.25??

Tnx Tom talley

--
ETC(SW) Thomas Talley Work: talleyt@nctslndn.navy.mil
NCTS Dept C4 Home: talleyt@ka9qpg.demon.co.uk
PSC 802 Box 44 Amatuer Radio: ka9qpg/g7ogu
FPO AE 09499-1200

729. PK-88 KISS/NOS HELP!!!

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-15 00:03:51 UTC
From: TGOODIN@delphi.com
Message-ID: <931114.68631.TGOODIN@delphi.com>
Source record: 51167

I am trying to set up nos (the dos version was ftp from Baltimore Area users)
and the k5jb version is running in unix (ATT 3.2 on a 3B2/400).
Both versions will activate the PK-88 TNC transmitter and the trace
mode leaves the impression that the X-mit data is ok. The local node
will even respond with a connect ack. On occasion (dos version only) I
get a connect but he performance is terrible. Can't get a connect via unix.
I have noticed in the KISS $01 mode the CON light blinks intermittently when
the DCD light is on. Some of the questions in this section seem to apply
and I was wondering if anyone else is running nos on a pk-88 and do
I perhaps not have a parameter set properly or need a firmware upgrade.
Direct ax25 via terminal to tnc seems fine.
Any suggestions appreciated, I'm desperate!!!!!
TGOODIN @ DELPHI.COM
INTERNET
KD4OFO @ W4NJA.#WKY.US.NA Packet

730. Re: Packet BBS spec by ARRL

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-15 08:18:51 UTC
From: blloyd@zaphod.axion.bt.co.uk
Message-ID: <2c7e1b$c54@zaphod.axion.bt.co.uk>
Source record: 51168

From article <2607@arrl.org>, by jbloom@arrl.org (Jon Bloom, KE3Z):
> In rec.radio.amateur.digital.misc, enge@enge.almaden.ibm.com writes:
>>I received a copy of a "Final Draft" specification on packet BBS
>>forwarding from the ARRL. Anyone know who the author is or how to
>>submit comments?
>
> This document was sent to BBS authors, TNC manufacturers (who are,
> typically, also providing BBS functions) etc. It is from the ARRL

Well I've never seen it. Has it been sent to authors outside of the USA,
or don't we count? Is it anything like the standards document that the
authors have been preparing ourselves? What is the scope of the document,
and is it to become a `standard'? Is there any chance that I could
get a copy?

Brian Lloyd
Maintenance Section, # e-mail : blloyd@axion.bt.co.uk
Software Technology Division, # Phone : +44 (0)473 646650
SSTF Building, BT Labs, Martlesham Heath, # Fax : +44 (0)473 643019
Ipswich, Suffolk. UK. IP5 7RE # Packet : G1NNA@GB7NNA.#31.GBR.EU

731. Macintosh Amateur Radio Software - November 1993

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-15 10:38:28 UTC
From: "Terry M. Stader KA8SCP" <p00489@psilink.com>
Message-ID: <2962449282.5.p00489@psilink.com>
Source record: 51170
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment

Newsgroups: rec.radio.amateur.misc,rec.radio.amateur.digital,rec.radio.amateur.packet,rec.radio.shortwave,rec.radio.info
Followup-To: rec.radio.amateur.misc
Approved: rec-radio-info@ve6mgs.ampr.ab.ca

Macintosh Amateur Radio Software - November 1993
Version 1.04.1

Please feel free to distribute this list as widely as possible. Many of you have asked if it is OK to cross-post this list? I don't mind, but I would like to know where it is going. If you think it should be cross-posted to other USENET groups, please let me know so I can try and manage these. We don't want to have any duplication or our welcome will be wore out!

Those of you that can tell me about ANY of these programs compatibility with System 7 would be appreciated! I am going to be adding a System 7 compatability section to EACH description in future releases. If the application is KNOWN to execute properly under System 7, the System 7 anotation will be placed as the last line of the product description. More clarification on levels of System 7 compatibility in the future editions... but this is a start!

Some of the information in this list was gleaned from flyers supplied by the software vendors, or in some cases from reviews in amateur radio publications or the README files included with the archive. Some of the information has not been verified for a long time; please check with the vendors/authors for the latest product specs, pricing, etc.

NEW/CHANGES: I've started adding more version numbers so that our users will know if they have the most current release. Thanks to those that have already sent them in... I'll accept all corrections!

This list contains info on updated for several applications: updated information on Kantronic's Host Master(thanks John-WD1V) and Lar's newest release of Morse Trainer 1.1. Ivo-ON1XK and Adam-PA2AGA both have been busy with new releases of IM/Mac and NET/Mac repsectively. I heard that NET/Mac Pro is coming down the road soon... anyone care to confirnm this? For those of you who don't know about it... it is a commercial endevaor written to support high-speed TCP/IP radio links by some of the hams in Califor

nia. It is a product that has been anticipated for awhile and is eagerly awaited although Adam has been doing an admirable job! Thanks Adam, Ivo and Lars for some great products!

I have been informed that The World, world.std.com, is the newest site carrying the Mac Ham Radio Software. Scott-WY1Z is maintaining these file as the Librarian of the Boston Amateur Radio Club. Look in the following path: /pub/hamradio/mac. Check at the bottom of this list for more information on ftp'able sites carrying Amateur Radio software. The ARRL ListServer is also carrying the latest version of this list... in case you loose this one!

*** Collections ***
<MacNet v5.31>
Join Macnet and get included in the latest version of "Macnet Roster", a HyperCard 2.x stack that now has > 400 members and is the proverbial "Who's Who" of hams using Macs. You'll find "Macnet Roster" a great tool for finding out who, what and how other hams are using their Macs with their ham stations. It even includes this file!
Send $30.00($40.00 DX) check or money order to: WD1V, John Seney, 144 Pepperidge Drive Manchester, NH 03103 USA.
All disks shipped First Class Mail PPd. Get the COMPLETE Macnet Software Collection ppd. on 10 disks!
Based on your interests, you'll also receive public domain shareware received by our members.
System 7

<Project Mac>
Contest logging, antenna design, satellite tracking, clip art, etc. Microsoft BASIC required for many of the programs. Most of this software is now available in the MacNet collection.
Send three formatted 800K Macintosh disks with stamped, self-addressed disk mailer to Stan Horzepa, WA1LOU, 75 Kreger Drive, Wolcott, CT 06716. (Compuserve: 70645,247)

<Amateur Radio Software for Macintosh>
Extensive catalog including logging, Morse code, gray line, test preparation, satellite tracking, contesting, and packet radio programs.
ZCo Corporation, P.O. Box 3720, Nashua, NH 03061. NOTE: This company has been rumored to be out of business!

<Amateur Radio #1>
Contains satellite tracking, Morse code, attenuator design, and Ohm's law calculator programs.
Kinetic Designs, P.O. Box 1646, Orange Park, FL 32067.

*** Test preparation ***
<Ham Test Stacks>
HyperCard stacks containing the entire question pool for each license class. Can be used for preparation or generating actual tests.
The current releases are: Novice v4.1(new questions eff. 7/1/93), Technician v4.0(new questions effective 7/1/93), General v2.4, Advanced v2.4, Extra v2.4
If you wish to receive these PUBLIC DOMAIN stacks, please send a SASE (self addressed STAMPED envelope - 2 ounces postage = .52) and 800K diskette to the author: Diana L. Carlson, 3 Spruce Street, Hudson, NH 03051. Diana will no longer send out the stacks unless the envelope has sufficient postage for return mail (in general, that means .52-.98, depending on size of envelope) and for those who send a standard business envelope, she takes no responsibility for the condition of the diskette through US mail.

Available via anonymous FTP from various sites, including uxc.cso.uiuc.edu (/pub/ham-radio). NOTE: The newest releases of Novice and Technician stacks are available at uxc.cso.uiuc.edu (5/6/93) Author is available via Internet: dls@genrad.com
System 7 savy with HyperCard 2.1

<MacHam>
Test generators and study aids for the Technician, General, Advanced, and Extra class written elements. Includes the complete question pool for each license. Hypercard based.

Coyne Co., P.O. Box 2000-200, Mission Viejo, CA 92692.
System 7 with HyperCard 2.1

*** Morse code practice ***
<N6MZV Morse Trainer>
Lets you practice any combination of letters, numbers, and/or punctuation characters. Can send user-created text files.
RT Martin, N6MZV, 10382 Orange Avenue, Cupertino, CA 95014. Also available via anonymous FTP from ftp.apple.com (/pub/ham-radio). Shareware.

<Morse Code Tutor v1.3> - used to be called Morse Tutor
Sends random groups of letters, numbers, and/or punctuation characters.
Available via anonymous FTP from ftp.apple.com (/pub/ham-radio). Or send formatted 800K Macintosh disk with stamped, self-addressed return disk mailer to Jack Brindle, WA4FIB, 726-175th Street SW, Bothell, WA 98012; Compuserve: 73365,606.

<MorseMania V1.0>
Designed for those already familiar with Morse code who want to improve their speed. Allows code practice at various speeds and audio pitches. Can generate random sequences or play the contents of user-created text files. Freeware.
Available via anonymous FTP from whirlwind.stanford.edu (/pub). Contact Edward Plumer, KM6IQ, for more information; Internet: plumer@isl.stanford.edu.

<MacMorse>
Randomly sends chosen characters. Lets you create your own practice files.
David A. Kall, 700 Marine Parkway #314, New Port Richey, FL 34652.

<MacMorse v1.3>
MacMorse is designed to help you learn Morse code and improve your receiving speed. It has several ways that it can send letters and punctuation. Shareware.
Doug Havenhill, Dynamics and Control, 7143 West Sunnyside Drive, Peoria, AZ 85345.

<MacSamuel>
Sends random words, random character groups, and user-created text files. Can also create simulated QSOs with randomly generated text and callsigns.
Avant Systems, P.O. Box 5437, Pittsburgh, PA 15206.

<Zihua Morse>
Designed to teach Morse code to beginners and to improve the accuracy and speed of advanced users. Responses can be typed into the computer; the program will calculate accuracy and timing statistics for each session. Optional speech synthesizer reads the characters out loud for an accuracy check.
Zihua, P.O. Box 51601, Pacific Grove, CA 93950.

<Sparks-II v2.0.5>
More Code training program.
Available for anonymous ftp at rahul.net /pub/davidj/radio

<Morse Master v1.0>
The newest of the morse code training programs. MM calculates the real speed as follows: Real speed = Number of Words/end time - start time. And the lengh of word is generating randomly, so if you set even 5WPM, sometimes another value will appear. However you should believe the slidebutton's value. If you repeat many times, the average speed should be 5WPM

(if not... anyway, believe the slidebutton's value).
Archive is available mac.archive.umich.edu, path:
mac/util/organization/morsemaster1.0.sit.hqx
The author can be reached thru the following e-mail addresses:
h79261a@kyu-cc.cc.kyushu-u.ac.jp. (Eiji AOL account is no longer valid - moved back to Japan after his studies.)

<Morse Trainer-US v1.1>
MorseTrainer is a powerful tool for learning and training Morse code. Features: Three different training modes: user text, random text, library text; Arbitrary signal pitch and timbre; Arbitrary speed and tempo; Multi-alphabet support; Random text generator; Text library editor; On-line alphabet; On-line manual; Help Balloons; And a lot more. New features in 1.1: Enhanced sound generator, volume control and risetime control. The pitch is set in steps of 10Hz instead of using MIDI frequencies; Speed and te

mpo limits increased to 80 words/minute as a result of the enhanced sound generator; User-selectable font in the Misc settings dialog.
FREEWARE!
This version uses TrueType fonts instead on bitmaps fonts so that the user can distinguish 0(zero) from O(character). Furthermore speed and tempo can be given in either characters/minute or words/minute.
Archive is available mac.archive.umich.edu, path: mac/util/organization/
Author is available via internet: sund@tde.lth.se
System 7 savy

<CW Speed Builder v3.0>
This program is for improving Morse Code (CW) reception skill. The major difference between this and other Morse Code training programs is that this one will not continue sending until you provide the correct answer.
Major changes which have been suggested and implemented since last version include: after three incorrect responses the program shows the correct character; the list of characters at the end which will show those you know and those you need more practice on; the frequency of the tone has been changed; volume of the tone has been reduced; the character " - " has been added (dah dit dit dit dah)
Comments can be sent as follows: America Online:K7UPJ, Internet:k7upj@aol.com, Packet radio:K7UPJ@KA3T, Compu$erv:70521,2356, Mail:Box 84, Cascade, MD 21719

*** Packet and other digital modes ***
<NET/Mac 3.2.31>
Allows simultaneous TCP/IP, AX.25, and NET/ROM connections. Requires a TNC with KISS mode. Copyright, but free for noncommercial use. The latest releases have added support of multi-port serial boards like AE's QuadraLink. It is now possible to have up to 10 TNCs connected up to a Nubus Mac!
Adam van Gaalen, PA2AGA, (Internet: adam@IGG.TNO.NL) has been making the modifications to NET/Mac. This version (and others) is available via anonymous FTP from ucsd.edu (/hamradio/packet/tcpip/pa2aga), mac.archive.umich.edu and sumex-aim.stanford.edu.
System 7

<Domain-to-Hosts Converter 1.0r3>
This application will create a hosts.net file from the domain.txt file that PC owners use with NOS. Created by Ken-NS1C is available on many TCP/IP packet switches in New England.program. Version 1.0r3 is the latest release.
System 7

<IM/Mac 1.0b27t>
Mailer program for use with the SMTP protocol. Alternative to the BM program that comes with NET/Mac. Written by Ivo van Ursel, ON1XK. Ivo is continuosly updating his mailer program. His newest release supports built-in BinHex support, selectable sound chimes for incoming mail, "quoting" of forwarded messages and lots more. If you are not using this program... why not? Check for the latest release in the directory before "blind" ftp'ing. This software supports System 7's Ballon Help and is System 7 savy!
Available via anonymous FTP from ucsd.edu (/hamradio/packet/tcpip/pa2aga).
Author is available via internet: on1xk@igg.tno.nl <<-- new address for Ivo
System 7 savy

<SoftKiss 1.8>
Control panel device that emulates a TNC running in KISS mode. For use with packet-radio modems such as the Baycom kit and PacketMac Modem. Version 1.8 July 9 1993 update since 1.6. KD6PAG found a bug in quoting recieved escape and end characters is sofktiss 1.6. The bug and the fix and patch are all correct, thanks for some great detective work. Lots of doc files and drawings included in this archive! Requires the Serial Tool from Apple's Communications Toolbox!
Available on the HAMNET forum of Compuserve, America Online and via anonymous FTP from akutaktak.andrew.cmu.edu (/aw0g).
System 7

<Savant 1.0.1>
A new packet terminal front-end by the author of Virtuoso. Savant has a split window interface, but it's also a multi-window, multi-connection
interface and will work with almost any TNC, unlike MacRatt or HostMaster.
A demo version of the product is available at cpre1.ee.iastate.edu (pub/ke0ph) or via US Mail, send a SAS disk mailer and disk to CM Technologies, Inc., RR#1, Box 83A, Kelley, IA 50134 (515) 597-2051.
System 7, 32-bit, '040 cache clean and it supports the required AppleEvents.

<MacRatt with FAX>
Terminal program for use with AEA's PK-232 multimode controller. Supports packet, CW, RTTY, AMTOR, and facsimile. Includes cable.
Advanced Electronic Applications, P.O. Box C-2160, Lynnwood, WA 98036.

<Host Master 1.2>
The Kantronics Host Master software provides an easy to use, multifunctional terminal program for the TNC. Host Master Mac is a simultaneous multi-mode terminal program for the Mac written by Kevin Krueger, N0IOS and marketed by Kantronics. It is a commercial product available from most of the ham radio stores and supports single and multiple packet connects, packet monitoring, and HF operation (with KAM) each on a separate window, all at the same time. This package retails for $69.95 in the US and is int

uitive, friendly, and well supported by Kantronics. Current version as of 10/20/93 is 1.2. It is hoped that a future version will support FAX but currently Hostmaster supports PACKET, AMTOR, RTTY, PACTOR (KAM ver. 6.0), CW, and NAVTEX.
Features: text and binary file transfer; packet conferencing; color or B&W windows; cut, copy, paste between windows; call exchange and data/time stamp; auto startup/shutdown commands; transmit buffers for each mode; simultaneous dual port, multiple connects; supports KPC-2, KPC-2400, KPC-4, KAM and Data Engine. Requires: Macintosh Plus w/ System 6.05 or better. Current Kantronics firmware.
System 7 compatible, with baloon help

<PacketTracker 1.05>
PacketTracker ver 1.05 is a program that monitors packet activity and keeps track of what is going on. It draws a graphical map showing who is talking to who and displays statistics of all current stations and keeps a running tally of activity.
PacketTracker was written for both the casual packet user and the network manager or BBS operator. The casual packet user will be able to learn a great deal about what is happening in packet around him; which stations are generating the most data and what some of them are. he will be able to see graphically what stations he can hitdirectly and which ones he cannot.
For the network manager and BBS operator, PacketTracker provides extensive insight to the operation of the local network and problems such as excessive retries on a path. It also allows for extensive logging of channel utilization and other pertinate information.
NOTE: This application requires the Apple's Serial Tool from the Communications Toolbox.
System 7

*** RTTY ***
<MacTTY>
Decodes Baudot or ASCII transmissions. Can also be used for packet radio and other digital modes (including landline data communications). Includes split screen, a 15,000-character type-ahead buffer, and canned messages.
Summit Concepts, Suite 102-190, 1840 41st Ave., Capitola, CA 95010.

<WeFaxWorks>
Weather facsimile terminal program for use with Kantronics TNCs.
Kantronics rfconcepts, 1202 E. 23rd Street, Lawrence, KS 66046.

<MacMultiCom 1.0>
MFJ sells MacMultiCom 1.0 for their 1278 multimode controller. MacMultiCom supports all of the modes of the 1278: packet, rtty, ascii, pactor, amtor, gray scale faxes, and many different formats of color sstv. The program requires a minimum of a MacPlus and a hard disk. Requires a color Macintosh and System 7 for best results.
System 7

*** Logging ***
<Ham Radio Station Logbook>
HyperCard stack that stores and displays radio contact information. Automatically stamps entries with time and date. Contacts can be sorted by frequency, call sign, or date of contact. Includes report formats, a "Q-code" reference list, and on-line help.
SanSoft, 892 E. Quail Place, Highlands Ranch, CO 80126. (The same program appears to be available from Heizer Software, 1941 Oak Park Blvd., Suite 30, Pleasant Hill, CA 94523.)

<FDLog!>
Contact logging and duping program. Can transmit any of ten programmable CW messages. Generates real-time statistics on QSO rates.
System One Control, 3900 85th Ave N, Suite 200, Brooklyn Park, MN 55443.

<MacContest 3.5>
Allows real-time or post-contest logging of a wide variety of contests. Checks for dupes, figures scores instantly, and offers various printouts. Interfaces to TNCs for CW and RTTY contests, to DX packet clusters, to Kenwood transceivers, and to MacinTalk for easy post-contest entry.
Gerald Eberle, HB9CEY, P.O. Box 13, CH-4417 Ziefen, Switzerland.

<LOGic>
(Macintosh version scheduled.) Lets you define the rules determining dupes (such as once per band or once per contest). Displays heading, distance, and other information about the country being worked. Automatically enters contact time; if interfaced directly to a radio, also enters the frequency, band, and mode. Shows status toward earning amateur-radio awards. User-definable database fields. Exchanges data with other programs.
Personal Database Applications, 2634 Meadow Bend Court, Duluth, GA 30136.

<HF Logger 1.2>
A real fine HyperCard logging program! (hey... thats all I got!)
N0QGQ

<Simple Log .2b>
This little utility is a handy way to create a logging file that you can later import into any data base for analysis, etc. It also shows you that just about anyone can use Think C and create something on the Mac! Let me know if you'd like the source code. WD1V @ WA1WOK.NH.USA.NA
Author is John Seney - WD1V, e-mail address is jseney@aol.com. For a copy of this program, mail a SASE disk mailer and 800K disk to: John D. Seney, WD1V, 144 Pepperidge Dr., Manchester, NH 03103
System 7

<Marathon>
Contesting/logging- Have seen references to (March 92 CQ magazine) and heard good things about MARATHON by N 0 IOS. I believe a demo was available for $8. Last address known is: Kevin Krueger, N0IOS, 1780 Ruth St., St.Paul, MN 551O9

*** Propagation, gray line, DX headings ***
<DX Map v1.1>
Displays a map of the world with the terminator. Gives location, prefixes, zone numbers, distance, and heading for any country you select. Freeware. Requires HyperCard 2.0.
Available via anonymous FTP from joker.optics.rochester.edu (in the /ham/dxmap directory). Or send a formatted 800K Macintosh disk with a stamped, self-addressed disk mailer to Len Saaf, NV2Z, 52 Raleigh Street, Rochester, NY 14620 (Internet: saaf@joker.optics.rochester.edu).

<SatTrak>
Primarily a satellite tracking program, but also calculates beam headings, Maidenhead grid locations, MUF plots, and band openings. Shareware.
Available via anonymous FTP from sumex-aim.stanford.edu (/info-mac/app). Or send a formatted 800K or 14.MB Macintosh disk with stamped, self-addressed disk mailer to Mike Pflueger, WD8KPZ, 6207 W. Beverly Lane, Glendale, AZ 85306.

<Sun Clock>
Desk accessory. Displays a color map of the world, including the terminator. Indicates current time for any location.
MLT Software, Inc., P.O. Box 368, Portland, OR 97207.

<DX Window>
Draws a great-circle world map centered on your QTH, with day/night terminator indicated. Displays over 400 DX locations with prefixes and beam headings.
Engineering Systems, Inc., P.O. Box 939, Vienna, VA 22183.

<Skycom 1.1>
Enter solar flux and get propagation predictions to desired areas of the world.
Engineering Systems, Inc., P.O. Box 939, Vienna, VA 22183.

<Skycom 1.5>
Provides sunlight status at both ends of a path; MUF, F0F2, and FOT frequencies; S/N ratio of the link; and other information.
Engineering Systems, Inc., P.O. Box 939, Vienna, VA 22183.

<DX Helper v1.57B>
Displays beam heading, distance, gray line, and propagation information. Generates great-circle maps. Identifies prefixes, zones, and oblasts. Includes code practice.
MacTrak Software, P.O. Box 1590, Port Orchard, WA 98336.

<Mac MiniMUF v5.1>
A greyline and propagation predictor based on the PC version of MiniMUF by K4CFV. It is available directly from him for the price of a formatted disk and SASE (disk mailer).
His address in callbook or: Bob Stamper K4CFV, 12510 Shadowrun Blvd., Riverview, FL 33569

<Mac ShortWave v1.2>
A program called Mac Shortwave that figures MUF and LUF.
BXA Research in Plano, Texas

*** Satellite tracking ***
<SatTrack v1.02>
Tracks one satellite across a world map as it moves, displays the instantaneous position of several satellites, or generates tables of all satellites visible from a certain location at a given time. Also calculates beam headings, Maidenhead grid locations, and MUFs.
Shareware.
Available via anonymous FTP from sumex-aim.stanford.edu (/info-mac/app). Or send a formatted 800K Macintosh disk with stamped, self-addressed disk mailer to Mike Pflueger, WD8KPZ, 6207 W. Beverly Lane, Glendale, AZ 85306.

<MacSat v3.1>
Tracks up to 21 satellites simultaneously, either in simulation or real-time mode. Text screen displays ground-track coordinates, range, mean anomaly, visibility (azimuth and elevation) and Doppler shift frequency information for all satellites being tracked. Graphical screen portrays the satellite ground tracks superimposed on a world map. Polar plot displays graphically the precise location of each visible satellite above the observer's horizon.
Developed by the Geodetic Research Laboratory of the University of New Brunswick.
Available from Richard B. Langley, R.R. 12, Fredericton, N.B. E3B 6H7, Canada (Internet: lang@unb.ca). A demo version of MacSat may be ftp'ed from directory PUB.CANSPACE on unbmvs1.csd.unb.ca.
System 7

<OrbiTrack>
<OrbiTrackFPU v2.1.4>
Calculates look angles to selected satellites, plots current satellite positions on a world map, and displays the visible passage of a satellite against background stars (either within the program itself or via a data file that can be read into the Voyager astronomy program). Please note that one version requires an FPU to operate!
BEK Developers, P.O. Box 47114, St. Petersburg, FL 33743. (Bill Bard, CompuServe:

75366,2557) (Note: This replaces BEK's previous MacSat program, which was not related to the program of the same name from UNB.)

<QuikMac>
Macintosh version of N4HY's QuikTrak program. Requires Microsoft BASIC. AMSAT, P.O. Box 27, Washington, DC 20044.

<Satellite Orbit Prediction Program>
Macintosh conversion of W3IWI program. Requires Microsoft BASIC.
Send formatted 800K Macintosh disk with stamped, self-addressed disk mailer to Earl Skelton, N3ES, 6311 29th Place NW, Washington, DC 20015. Or send self-addressed stamped envelope for source listing.

<Satellite Pro>
Uses world maps and tables to indicate rising and setting schedules, current locations, mutual visibility opportunities, and footprints. Includes Mercator, polar, and great-circle displays. Optional antenna control.
MacTrak Software, P.O. Box 1590, Port Orchard, WA 98366.

<MacSPOC>
Author is on AOL and can be reached as adamod@aol.com via the internet.

*** Antenna design ***
<MacMiniNEC>
Chris Smolinski, N3JLY, 40 South Lake Way, Reisterstown, MD 21136.

*** Radio control ***
<ICOM Radio Control>
Provides a Macintosh interface for controlling ICOM transceivers that use the CI-V remote-control system. Lets you quickly change frequencies and modes. Also does logging and duping. Requires a CI-V to RS-422 converter (schematic included with program).
KE6FG Software, 9763 Pali Avenue, Tujunga, CA 91042.

<FreqValet>
Provides frequencies and DX program info for shortwave radio listeners. The program databases update automatically at 15, 30, or 60 minute intervals, thus providing a continuous display of broadcasts on-the-air at any given time in a spreadsheet like format. Features include sorting of data, scanning, and on-screen changing of databases. The program will convert Tom Sundstrom's dBase shorwave broadcast listing to FreqValet format and will do the same for Shorwave Navigator users. Separate cards are pro

vided for DX Programs, Ship to Shore, and Utility broadcasts. Computer control modules are available at extra cost for the Drake R8, Kenwood R-5000, JRC NRD-525, and NRD-535 receivers.
DX Computing, 232 Squaw Creek Road, Willow Park, TX 76087. Telephone (817) 441-9188 or (817) 441-5555 (fax).
Author is available via internet: dxcomp@aol.com
System 7 with HyperCard 2.1

*** Ham radio BBSs ***
<Digikron Systems BBS>
Various ham-related applications, including logging, propagation, Morse code, and packet. (408) 253-1309.

<MacScience BBS>
Various ham-related applications, including antenna design, propagation, WEFAX, packet, and Morse code. (408) 866-4933.

<N8EMR BBS>
Various ham-related files, including packet, DXing, and contesting software; AMSAT bulletins; and several ham newsletters. (614) 895-2553. Also available via FTP on AMPRnet at 44.70.0.1.

<WB3FFV BBS>
Various ham-related software, including packet, contesting, and Morse code applications. (410) 661-2475, 661-2598, and 661-2648.

<ChowdaNet BBS>
(more info at a later date)

*** Online Services carrying Ham Radio software ***
<America Online>
Supports Macintosh, PC's DOS & Windows versions, PS/1, Apple //s, Casio Zoomer. Ham Radio Club (keyword = ham radio) supports all computer types. Software for amateur radio, scanners, swl'ers and general electronics. For 10 FREE hours of trial time send your snail mail address to tstader@aol.com or call 1-800-827-6364 Ext. 6285. This site NOT ftb'able (yet). Internet e-mail.

<CompuServe>
Supports any communications software on most computers Ham Radio area (go hamnet) supports all types of communications formats. Call 1-800-848-8199 for information. This site NOT ftb'able. Internet e-mail.

<Delphi>
(more info at a later date) Internet e-mail

<GEnie>
(more info at a later date) Internet e-mail

<Prodigy>
Has ham radio message areas, no downloadable software. Limited internet e-mail.

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Misc. Internet FTP sites for Amateur Radio Macintosh software

joker.optics.rochester.edu (/ham)
sumex-aim.stanford.edu (/info-mac/app)
mac.archive.umich.edu various locations
uxc.cso.uiuc.edu (/pub/ham-radio)
ucsd.edu (/hamradio) many different subdirectories
(/hamradio/incoming) newest files temp holding area
(/hamradio/packet/tcpip/pa2aga) NET/Mac & IM/Mac area
ftp.apple.com (/pub/ham-radio)
akutaktak.andrew.cmu.edu (/aw0g) softkiss-mac
nic.switch.ch (/software/mac/ham-radio)
world.std.com (/pub/hamradio/mac)

If you know of any other sites, please e-mail me info so I may keep this list as up to date as possible!

- Terry

Thanks for all of the notes and updates! Keep them coming. Did I get all of the versions right?

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NOTE: Much of this work was done by Patty-N6BIS as she collected information from many vendors. I would like to keep this list as up to date as possible. Please feel free to drop me a note if you have any additional software to this list.

DISCLAIMER: The software listed is not endorsed by Apple Computer, Inc.(c) nor has it all been tested by the author/providers of this information.
****
* Recompiled by Terry Stader - KA8SCP (tstader@aol.com) *
* Original list compiled by Patty Winter - N6BIS *
* New information last added 9/93 *
* some information not rechecked since early 1991. *
****

Terry M. Stader, KA8SCP, America Online (AOL) Ham Radio Club Host
Macintosh Amateur Radio Software List Maintainer
Internet: tstader@aol.com or p00489@psilink.com
Packet: KA8SCP@WA1PHY.#EMA.MA.USA.NOAM

732. Guide to the Personal Radio Newsgroups

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-15 12:00:25 UTC
From: pschleck@unomaha.edu
Message-ID: <radio/personal-intro-1-753364821@unomaha.edu>
Source record: 51169
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.info,rec.answers,news.answers

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Posted-By: auto-faq 2.4
Archive-name: radio/personal-intro
Revision: 1.5 09/18/93 16:49:31
Changes: new mailing lists, .packet rmgroup, and .policy updates

(Note: The following is reprinted with the permission of the author.)

This message describes the rec.radio.amateur.*, rec.radio.cb, rec.radio.info,
and rec.radio.swap newsgroups. It is intended to serve as a guide for the new
reader on what to find where. Questions and comments may be directed to the
author, Jay Maynard, K5ZC, by Internet electronic mail at
jmaynard@oac.hsc.uth.tmc.edu. This message was last changed on 18 September
1993 to add the mailing lists for the new rec.radio.amateur newsgroups, to
note the rmgroup of rec.radio.amateur.packet, and to officially retire some
(in)famous threads of discussion on rec.radio.amateur.policy.

History
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Way back when, before there was a Usenet, the Internet hosted a mailing list
for hams, called (appropriately enough) INFO-HAMS. Ham radio discussions
were held on the mailing list, and sent to the mailboxes of those who had
signed up for it. When the Usenet software was created, and net news as we
now know it was developed, a newsgroup was created for hams: net.ham-radio.
The mailing list and the newsgroup were gatewayed together, eventually.

As the net grew, and as packet radio came into vogue, packet discussion began
to dominate other topics in the group and on the list. This resulted in the
logical solution: a group was created to hold the packet discussion, and
another corresponding mailing list was created as well: net.ham-radio.packet
and PACKET-RADIO, respectively.

These two groups served for several years, and went through Usenet's Great
Renaming essentially unchanged, moving from net.ham-radio[.packet] to
rec.ham-radio[.packet]. Readership and volume grew with the rest of the
network.

The INFO-HAMS mailing list was originally run from a US Army computer at
White Sands Missile Range, SIMTEL20. There were few problems with this
arrangement, but one was that the system was not supposed to be used for
commercial purposes. Since one of hams' favorite pastimes is swapping
gear, it was natural for hams to post messages about equipment for sale
to INFO-HAMS/rec.ham-radio. This ran afoul of SIMTEL20's no-commercial-use
restriction, and after some argument, a group was created specifically
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for messages like that: rec.ham-radio.swap. This group wasn't gatewayed to a mailing list, thus avoiding problems.

While all this was happening, other folks wanted to discuss other aspects of the world of radio than the personal communications services. Those folks created the rec.radio.shortwave and rec.radio.noncomm newsgroups, and established the precedent of the rec.radio.* hierarchy, which in turn reflected Usenet's overall trend toward a hierarchical name structure.

The debate between proponents of a no-code ham radio license and its opponents grew fierce and voluminous in late 1989 and 1990. Eventually, both sides grew weary of the debate, and those who had not been involved even more so. A proposal for a newsgroup dedicated to licensing issues failed. A later proposal was made for a group that would cover the many recurring legal issues discussions. During discussion of the latter proposal, it became clear that it would be desirable to fit the ham radio groups under the rec.radio.* hierarchy. A full-blown reorganization was passed by Usenet voters in January 1991, leading to the overall structure we now use.

After the reorganization, more and more regular information postings began to appear, and were spread out across the various groups in rec.radio.*. Taking the successful example of the news.answers group, where informational postings from across the net are sent, the group rec.radio.info was created in December, 1992, with Mark Salyzyn, VE6MGS, initially serving as moderator.

In January, 1993, many users started complaining about the volume in rec.radio.amateur.misc. This led to a discussion about a second reorganization, which sparked the creation of a mailing list by Ian Kluft, KD6EUI. This list, which was eventually joined by many of the most prolific posters to the ham radio groups, came up with a proposal to add 11 groups to the rec.radio.amateur hierarchy in April 1993. The subsequent vote, held in May and early June, approved the creation of five groups: rec.radio.amateur.digital.misc (to replace .packet), .equipment, .homebrew, .antenna, and .space.

The Current Groups

I can hear you asking, "OK, so this is all neat history, but what does it have to do with me now?" The answer is that the history of each group has a direct bearing on what the group is used for, and what's considered appropriate where.

The easy one is rec.radio.amateur.misc. It is what rec.ham-radio was renamed to during the reorganization. Any message that's not more appropriate in one of the other groups belongs here, from contesting to DX to ragchewing on VHF to information on becoming a ham.

The group rec.radio.amateur.digital.misc is for discussions related to (surprise!) digital amateur radio. This doesn't have to be the common two-meter AX.25 variety of packet radio, either; some of the most knowledgeable folks in radio digital communications can be found here, and anything in the general area is welcome. The name was changed to emphasize

this, and to encourage discussion not only of other text-based digital modes, such as AMTOR, RTTY, and Clover, but things like digital voice and video as well. The former group, rec.radio.amateur.packet, should be removed by September 21st, 1993. It is obsolete, and you should use .digital.misc instead (or the appropriate new mailing list, mentioned below). The group has .misc as part of the name to allow further specialization if the users wish it, such as .digital.tcp-ip.

The swap group is now rec.radio.swap. This recognizes a fact that became evident shortly after the original group was formed: Hams don't just swap ham radio gear, and other folks besides hams swap ham equipment. If you have radio equipment, or test gear, or computer stuff that hams would be interested in, here's the place. Equipment wanted postings belong here too. Discussions about the equipment generally don't; if you wish to discuss a particular posting with the buyer, email is a much better way to do it, and the other groups, especially .equipment and .homebrew, are the place for public discussions. There is now a regular posting with information on how to go about buying and selling items in rec.radio.swap; please refer to it before you post there.

The first reorganization added two groups to the list, one of which is rec.radio.amateur.policy. This group was created as a place for all the discussions that seem to drag on interminably about the many rules, regulations, legalities, and policies that surround amateur radio, both existing and proposed. Recent changes to the Amateur Radio Rules (FCC Part 97) have finally laid to rest the Great Usenet Pizza Autopatch Debate as well as complaints about now-preempted local scanner laws hostile to amateurs, but plenty of discussion about what a bunch of rotten no-goodniks the local frequency coordinating body is, as well as the neverending no-code debate, may still be found here.

The other added group is rec.radio.cb. This is the place for all discussion about the Citizens' Band radio service. Such discussions have been very inflammatory in rec.ham-radio in the past; please do not cross-post to both rec.radio.cb and rec.radio.amateur.* unless the topic is genuinely of interest to both hams and CBers - and very few topics are.

The rec.radio.info group is just what its name implies: it's the place where informational messages from across rec.radio.* may be found, regardless of where else they're posted. As of this writing, information posted to the group includes Cary Oler's daily solar progagation bulletins, ARRL bulletins, the Frequently Asked Questions files for the various groups, and radio modification instructions. This group is moderated, so you cannot post to it directly; if you try, even if your message is crossposted to one of the other groups, your message will be mailed to the moderator, who is currently Mark Salyzyn, VE6MGS. The email address for submissions to the group is rec-radio-info@ve6mgs.ampr.ab.ca. Inquires and other administrivia should be directed to rec-radio-request@ve6mgs.ampr.ab.ca. For more information about rec.radio.info, consult the introduction and posting guidelines that are regularly posted to that newsgroup.

The groups rec.radio.amateur.antenna, .equipment, .homebrew, and .space are for more specialized areas of ham radio: discussions about antennas,

commercially-made equipment, homebrewing, and amateur radio space operations. The .equipment group is not the place for buying or selling equipment; that's what rec.radio.swap is for. Similarly, the .space group is specifically about amateur radio in space, such as the OSCAR program and SAREX, the Shuttle Amateur Radio EXperiment; other groups cover other aspects of satellites and space. Homebrewing isn't about making your own alcoholic beverages at home (that's rec.crafts.brewing), but rather construction of radio and electronic equipment by the amateur experimenter.

Except for rec.radio.swap and rec.radio.cb, all of these newsgroups are available by Internet electronic mail in digest format; send a mail message containing "help" on a line by itself to listserv@ucsd.edu for instructions on how to use the mail server.

All of the groups can be posted to by electronic mail, though, by using a gateway at the University of Texas at Austin. To post a message this way, change the name of the group you wish to post to by replacing all of the '.'s with '-'s - for example, rec.radio.swap becomes rec-radio-swap - and send to that name@cs.utexas.edu (rec-radio-swap@cs.utexas.edu, for example). You may crosspost by including multiple addresses as Cc: entries (but see below). This gateway's continued availability is at the pleasure of the admins at UT-Austin, and is subject to going away at any time - and especially if forgeries and other net.abuses become a problem. You have been warned.

A Few Words on Crossposting
==========

Please do not crosspost messages to two or more groups unless there is genuine interest in both groups in the topic being discussed, and when you do, please include a header line of the form "Followup-To: group.name" in your article's headers (before the first blank line). This will cause followups to your article to go to the group listed in the Followup-To: line. If you wish to have replies to go to you by email, rather than be posted, use the word "poster" instead of the name of a group. Such a line appears in the headers of this article.

One of the few examples of productive cross-posting is with the rec.radio.info newsgroup. To provide a filtered presentation of information articles, while still maintaining visibility in their home newsgroups, the moderator strongly encourages cross-posting. All information articles should be submitted to the rec.radio.info moderator so that he may simultaneously cross-post your information to the appropriate newsgroups. Most newsreaders will only present the article once, and network bandwidth is conserved since only one article is propagated. If you make regular informational postings, and have made arrangements with the moderator to post directly to the group, please cross-post as appropriate.

--
Jay Maynard, EMT-P, K5ZC, PP-ASEL | Never ascribe to malice that which can
jmaynard@oac.hsc.uth.tmc.edu | adequately be explained by stupidity.
"If my car ran OS/2, it'd be there by now" -- bumper sticker
GCS d++ p+ c++ l+ m+/- s/++ g++ w++ t+ r

--
73, Paul W. Schleck, KD3FU

pschleck@unomaha.edu

Celebrating 60 years of the Univ. of Maryland ARA - W3EAX (1933-1993)

733. Re: Packet antenna?????

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-15 14:19:00 UTC
From: harold@cc.gatech.edu
Message-ID: <1993Nov15.141900.18252@cc.gatech.edu>
Source record: 51171

In article <CGFn2q.9DH@freenet.carleton.ca>,
Lloyd Carr <aa963@Freenet.carleton.ca> wrote:
>In a previous article, fsrla@aurora.alaska.edu () says:
>
>>What would a good 2m packet antenna

>Anything will work. I use a Ringo Ranger vertical. If you're
>quite a distance away from your main feed, you could use
>a yagi.

While anything may work, directional antennas should not be
your first choice, because they increase the hidden node
problem. Use an omni antenna, unless there is no way to
use repeaters to get to your destination.

good luck.
harold

FORBES, HAROLD C. N5JCM
Georgia Institute of Technology, Atlanta Georgia, 30332
uucp: ...!{allegra,amd,hplabs,seismo,ut-ngp}!gatech!cc!harold
ARPA: harold@cc.gatech.edu PACKET: N5JCM @ W4QO

734. Kantronics Host mode stuff

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-15 15:38:03 UTC
From: RABALAIS@symantec.com
Message-ID: <RABALAIS.2.0@symantec.com>
Source record: 51173

Does anyone out there know where I can find specs/source on using the Kantronics Host Mode? I have a KPC-2 that I'm about to switch to KPC-3, and I want to write a PBBS using Host Mode.

The Kantronics docs have about 1 1/2 pages on Host mode, which doesn't say that much! ANy help is appreciated.

73,
Gerard Rabalais N0PRQ
rabalais@symantec.com

735. wb7tpy gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-15 17:07:56 UTC
From: cowart@convex.com
Message-ID: <cowart.753383276@neptune>
Source record: 51178

Last Friday, after seeing the article aboout the wb7tpy gateway, I successfully sent a message to myself via a local switch.

however, today I tried to send one to another ham, and the local mailer deamon can't find "gate@wb7tpy.az.usa.na"

Is this the right address? I can't find the original post.

please help!

Mike
WA5CMI

736. Re: broadcasting

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-15 18:00:56 UTC
From: jay@medicine.dmed.iupui.edu
Message-ID: <jay.3.2CE7C3D8@medicine.dmed.iupui.edu>
Source record: 51174

In article <arog.753190787@BIX.com> arog@BIX.com (arog on BIX) writes:
>Subject: Re: broadcasting
>From: arog@BIX.com (arog on BIX)
>Date: 13 Nov 93 11:39:47 GMT

>todd@goat.geo.arizona.edu (todd) writes:

>>what sort of equiptment do i need in order to broadcast on an AM or FM
>>frequency.-sorry if this is the wrong BBS.
>>todd

I don't believe you need a commercial license to broadcast on FM if you follow the FCC rules. The FCC rules say you can transmit on FM but your output has to be less than x mVolts a x meters.

JDR electronics carries an FM stereo transmitter kit that is legal if you don't modify it by adding things such as a power amplifier and a large antenna.

If anyone is interested, I can lookup an summarize the requirements.

Jay

737. Re: Packet BBS spec by ARRL

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-15 19:31:19 UTC
From: hanko@wv.mentorg.com
Message-ID: <2c8le7$2nr@wvhpadm1.mentorg.com>
Source record: 51175

In article <2buojv$kr9@juniper.almaden.ibm.com>, enge@enge.almaden.ibm.com writes:
|> I received a copy of a "Final Draft" specification on packet BBS
|> forwarding from the ARRL. Anyone know who the author is or how to
|> submit comments?
|>
|> Roy Engehausen, AA4RE
|> enge@almaden.ibm.com

I too got a copy in the mail, and would like to make comments
to the (as of yet) unknown author.

... Hank

--

Hank Oredson @ Mentor Graphics
Internet : hank_oredson@mentorg.com
Amateur Radio: W0RLI@W0RLI.OR.USA.NA

738. Re: Packet BBS spec by ARRL

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-15 19:36:06 UTC
From: hanko@wv.mentorg.com
Message-ID: <2c8ln6$2nr@wvhpadm1.mentorg.com>
Source record: 51176

In article <PME.93Nov12212504@gaia.electrum.kth.se>, pme@gaia.electrum.kth.se (Peter Enderborg) writes:
|> Where do i find that one ? Is it public or what ?
|> /Peter, SM0OHI

This is NOT the paper copy that some of us got in the mail, nor is it the official copy the authors listed below are working on. It is my working copy that I last submitted to the authors conference, and should be quite close the the actual working draft in process. Note that the authors have not yet authorized release of this document as any "official" specification. It does, however, come very close to being a useful spec, and we all agree that "almost everything" is correct ...

... Hank

BBS Interface Specification
Working Draft
9/28/93

Introduction
Section 1 - Establishing connection
Section 2 - Forwarding
Section 3 - Reverse forwarding
Section 4 - Forwarding to old BBSs
Section 5 - Error Conditions
Section 6 - BNF Summary
Section 7 - Feature Letter Use

Current mailing list
BBS_authors@arasmith.com

bob@arasmith.com (Bob Arasmith, N0ARY)
hank_oredson@mentorg.com (Hank Oredson, W0RLI)
wd6cmu@netcom.com (Eric Williams, WD6CMU)
enge@almaden.ibm.com (Roy Engehausen, AA4RE)
71151.720@CompuServe.COM (Victor Poor, W5SMM)
blloyd@axion.bt.co.uk (Brian Lloyd, G1NNA)
map@hopper.cba.csuohio.edu (Mike Pechura, WA8BXN)
durham@w2xo.pgh.pa.us (James Durham, W2XO)
johan@ece.orst.edu (Johannes Reinalda, WG7J)
trentin@enac.dgac.fr (to J-P Roubelat, F6FBB)
sproul@sproul.com (Mark Sproul, KB2ICI)
mike@km6px.arasmith.com (Mike Stickney, KM6PX)
70007.1365@compuserve.com (Ed Juge, W5TOO)

73126.3260@compuserve.com (Craig McCartney, WA8DRZ)

Via US Mail
Michael Jaggers, WB4TTZ
1377 Columbia Ave, Franklin, TN 37064

Introduction -
This document is meant to define the interaction between two BBSs exchanging messages. It is not the goal of the document to specify the interface of the future but merely represent what a BBS can be expected to see at the current time.

It is hoped that this specification will be followed by another that defines the base rules for all BBS programs to adopt. This should eliminate the current problems with incompatibilities and overloaded operators. If you create a BBS to this specification you should be able to interconnect with virtually any BBS currently in use. Any extensions you add will put you at risk, the subsequent spec is to identify these areas.

In brief the following sequence of events takes place when the BBSs connect for forwarding:

Master System Slave System
------------ --------------
{Connect}
[SID]
N9ZZZ >

[SID]

>

SB ARES @ ALLCA < W7ZZZ $ARES0108

OK

message subject
message routing headers
message body
/EX

>

SB WANT @ ALLUS < W8AAA $1029_N0XYZ

NO
>

F>

SP WA2ABC @ N2AAA < N9AAA

OK

```
message subject
message routing headers
message body
/EX

F>

{Disconnect}
```

This represents a simple example of connecting, establishing a common protocol, forwarding and reverse forwarding. This document will look more closely at each of these phases.

In the text the BBS initiating the connect will be referred to as the MASTER and the remote BBS will be referred to as the SLAVE.

Each command and exchange will be presented in BNF (Backus-Naur Form) which is a context-free grammar widely used to describe computer language syntax.

All commands and fields are case insensitive.

Meta-syntactic information

```
[x] = Optional: zero or one x
(x y) = Grouping: treat multiple tokens as a single token
<> = Set
```

Characters:

```
NUL = <0x00>
CNTRL_C = <0x03>
TAB = <0x09>
CR = <0x0D>
LF = <0x0A>
CNTRL_Z = <0x1A>
SP = <0x20>
```

Character sets:

```
ALPHA = <'A'-'Z'>
DIGIT = <'0'-'9'>
ALNUM = ALPHA | DIGIT
ASCII = <0x20-0xFF>
SPACE = SP | TAB
8BIT = <0x01 - 0xff, except CR, LF, CTRL_Z>
```

Character sequences:

```
EOL = CR | CR LF

NUMBER = DIGIT | NUMBER DIGIT
WHITE = SPACE | WHITE SPACE

ASCII_STR = ASCII | ASCII_STR ASCII
ALNUM_STR = ALNUM | ALNUM_STR ALNUM
```

8BIT_STR = 8BIT | 8BIT_STR 8BIT

Throughout this document we will present a verbose translation of the grammar highlighting any points that may not be obvious but could have significant affect. There will also be examples illustrating what can actually be expected.

Section 1 - Establishing connection

When connecting to a BBS the first line the BBS sends must be the SID (System IDentifier). The SID is used to determine what features are supported by BBS. The existence of the SID implies that the system supports reverse forwarding and OK/NO message rejection. There still exist old BBS codes which do not present a SID at connect. Refer to Section 4 for information on forwarding to these old style BBS sytems.

SID sent by both MASTER and SLAVE

AUTHOR_ID = <ASCII_STR, except '[', ']' and '-'>
AUTHOR_DATA = <ASCII_STR, except '[' and ']'>
FEATURE = ALPHA [DIGIT]
FEATURE_LIST = FEATURE | FEATURE_LIST FEATURE
SID = "[" AUTHOR_ID "-" [AUTHOR_DATA "-"] FEATURE_LIST [$]"]" EOL

The AUTHOR_ID and FEATURE_SET must be present. If the optional AUTHOR_DATA is present it must be separated from the other two fields by a '-'. AUTHOR_DATA may contain the '-' character.

The AUTHOR_ID and AUTHOR_DATA are typically a portion of the authors callsign or BBS name and version number, respectively.

Each FEATURE consists of a letter, denoting the feature and an optional number, denoting the feature level. The absence of a version number implies version zero.

If BID's are supported, '$' must be the last symbol in the FEATURE_SET.

The recommended minimal support is BID and Hierarchical location identifiers. These are necessary for the proper operation of the network.

EXAMPLE

[ZFJ-2.3-H$]

The original prompt received from the SLAVE BBS may contain additional information intended for users. As soon as the SID is received by the SLAVE BBS it should respond with an abbreviated PROMPT, with the ASCII_STR field being empty.

Section 2 - Forwarding

A message can either be rejected or accepted by the SLAVE. There are many reasons that the SLAVE my choose to reject a message but the most common will be duplicate bid, indicating the SLAVE already has the message. Here is an overview of the exchange.

```
ACCEPT EXCHANGE:

MASTER SLAVE
------ -----
PROMPT
SEND_CMD
RESPONSE (OK)
MESSAGE
COMMENT
PROMPT

REJECT EXCHANGE:

MASTER SLAVE
------ -----
PROMPT
SEND_CMD
RESPONSE (NO)
PROMPT

The SLAVE indicates it's prepared to accept a command by issuing a PROMPT.
The PROMPT is also used as an an acknowledgement that the last message
has be received.

The MASTER initiates the message exchange by issuing a a SEND_CMD. This
command contains all the information necessary for the SLAVE to decide
whether to ACCE or REJECT the message. It contains message type,
destination, originator and possibly a bid.

COMMENT = <ASCII_STR, except '>'>
PROMPT = [COMMENT] ">" EOL

TYPE = 'B' | 'P' | 'T'
CALLSIGN = <ASCII_STR, except '@', '.', max length 6>
LOC = <ASCII_STR, except '@', '.', max length 6>
HLOC = LOC | <HLOC "." LOC, max length 31>
BBS = CALLSIGN ["." HLOC]
TO = CALLSIGN [WHITE "@" WHITE BBS]
FROM = CALLSIGN
BID = <ASCII_STR, max length 12>

SEND_CMD = "S" TYPE WHITE TO [WHITE "<" WHITE FROM] [WHITE "$" BID]

HLOC is the hierarchical location of the system. It is defined by
the document "INTERNATIONAL ROUTING DESIGNATORS", ARRL Networking
Conference Proceedings xxx.

The TO field commonly takes the following forms:

callsign @ BBS.hloc ; N6ZFJ @ N6QMY.CA.USA.NA
category @ distrib ; WANT @ ALLCA
category @ BBS.hloc ; WANT @ N6QMY.CA.USA.NA
category @ distib.hloc ; INFO @ ALLCA.CA.USA.NA
```

The first two are seen most often, but the other two forms are seen.
The first two forms are also normally associated with the
message type of PERSONAL and BULLETIN respectively.

White space is required on either side of the '@' and between the
'<' and the senders callsign. There cannot be white space between
the '$' and the BID.

EXAMPLE

SB WANT @ ALLSCV < N6ZFJ $2345_N6QMY

A "BID" (Bulletin IDentifier) is associated with each Bulletin,
and may be associated with any Personal message.

If a BID is not given explicitly when the message is entered into
the system, and the message type requires a BID, one is created
automatically from the message number and callsign of the system
into which the message was initially entered.

NOTE:

It is suggested that a generated BID have the form nnn_BBS,
where nnn is the message number at the originating BBS system,
and BBS is the callsign of the originating BBS system.

COMMON_BID = MSG_NUM "_" CALLSIGN

BBS codes are free to create whatever form they wish as long as the
length doesn't exceed 12 characters.

Messages to a distribution, whether they are bulletins or personal
messages, must have a BID. Personal messages to a specific user may
carry a BID if the user supplied one, but will not be given a default
BID. NTS message never carry a BID.

The SLAVE BBS determines from the SEND_CMD whether or not to accept
the message. The reasons for rejection is usually that the message
already exists on the SLAVE system (i.e. a duplicate BID), or possibly
a system related problem.

Sent by SLAVE in response to SEND_CMD (or by MASTER if in reverse
forward mode).

RESPONSE = ACCEPT | REJECT

ACCEPT = "OK" [WHITE COMMENT] EOL

REJECT = "N" ["O"] [WHITE COMMENT] EOL

NOTE:
The syntax of responses has grown in a random fashion. Many BBS programs
expect to see the entire words "OK" and "NO" while others simply look
at the first letter. It is suggested that new BBS codes should present the
words "NO" and "OK", but look for only the first letter. Doing so should
ensure compatibility with existing BBS codes.

EXAMPLE
Master: SB WANT @ ALLCAN < N6ZFJ $4567_N0ARY
Slave: NO duplicate bid
Slave: >

Master: SB WANT @ ALLCAN < N6ZFJ $4567_N0ARY
Slave: OK #32190
Master: message body
Master: /EX
Slave: Message being held for sysop review
Slave: >

It is required that the "OK" and "NO" strings be followed by white
space or EOL. Some BBS programs will fail to recognize them otherwise.

EXAMPLE
Master: SB WANT @ ALLCAN < N6ZFJ $4567_N0ARY
Slave: NO, already have it
Slave: >

This would fail with some existing BBS codes due to
the comma following the "NO" string.

If the SLAVE BBS responds with a REJECT condition the message should
not be sent and the MASTER should ignore any response from the SLAVE
until PROMPT is encountered. The MASTER can then submit a new SEND_CMD,
initiate reverse forwarding or disconnect.

Once the SLAVE has issued the ACCEPT response, the MASTER BBS
should immediately send the message subject, routing headers,
message body and EOM. The SLAVE will acknowledge with PROMPT
once it receives an EOM.

Message Routing Header

SUBJECT = <ASCII_STR, max length 79> EOL
YEAR = DIGIT DIGIT
MONTH = DIGIT DIGIT
DAY = DIGIT DIGIT
HOUR = DIGIT DIGIT
MINUTE = DIGIT DIGIT

STAMP = "R:" YEAR MONTH DAY "/" HOUR MINUTE ["Z"]
MSG_NUM = <NUMBER, range 1 - 65535 (0xFFFF)>

HEADER1 = STAMP WHITE MSG_NUM "@" BBS EOL
HEADER2 = STAMP WHITE "@:" BBS WHITE [ASCII_STR] "#:" MSG_NUM [ASCII_STR]
HEADER = HEADER1 | HEADER2

Message structure

HEADERS = HEADER | HEADERS HEADER
EOM = (CNTRL_Z EOL) | (EOL "/EX" EOL)
BODY = 8BIT_STR | BODY EOL 8BIT_STR
MESSAGE = SUBJECT [HEADERS] EOL [BODY] EOM

EXAMPLE

Example message
R:930108/1729 @:N6QMY.#NOCAL.CA.USA.NA Fremont #:1114 Z:94536
R:930108/1259 1530@KA6FUB.#NOCAL.CA.USA.NA
R:930107/1638z @:WD6CMU.#NOCAL.CA.USA.NA "OSKbox" #:10576 Z:94805
R:930107/1045 50724@WX3K.#NOCAL.CA.USA.NA

message body will go here, the blank line above separates the
body from the routing headers. When the body is through it should be
terminated as follows:
/EX

NOTE:
Both forms of the header described above are seen, and should be parsed.
In either case there may be comments found at the end of the header line,
or between the BBS and the MSG_NUM entries in HEADER2.

HEADER2 is derived from the header form used in early BBS codes.
it allows addtional information to be passed in the header and parsed
if desired. Some examples of these additional fields seen are:

Z:zipcode
O:orginator
$:bid
C:name_of_sysops_cat

NOTE:
The time stamp in the routing header must be in GMT. Some existing BBS
codes provide the time stamp in other than GMT, and may include a time
zone indicator after the time stamp. This should be considered in the
design of header parsers.

Each system that handles the message places it's routing header
at the top of the message headers before passing the message to
the next BBS. The headers must begin in column 1. A blank line
separates the routing headers from the body of the message.

The last (oldest) routing header shows the BBS where the message
originated. This header is the only source for this information.
The information about the originating BBS is used to create a
return address for reply messages.

Here are two examples of the same header, in the two different formats:

R:930101/0000 1530@KA6FUB.#NOCAL.CA.USA.NA
R:930101/0000 @:KA6FUB.#NOCAL.CA.USA.NA #:1530

These examples show the different syntax for the message number and
originating BBS address. All fields not shown in the examples are
optional at the discretion of the sysop.

Section 3 - Reverse forwarding

Once all messages have either been successfully forwarded from the MASTER
to the SLAVE, or been rejected by the SLAVE, the MASTER may accept
messages from the SLAVE. i.e. the MASTER and SLAVE exchange roles.
This is called "reverse forwarding".

ACCEPT EXCHANGE:

```
MASTER SLAVE
------ -----
PROMPT ">"
REV_FWD "F>"
SEND_CMD
RESPONSE "OK"
MESSAGE
COMMENT
REV_FWD "F>"
```

REJECT EXCHANGE:

```
MASTER SLAVE
------ -----
PROMPT ">"
REV_FWD "F>"
SEND_CMD
RESPONSE "NO"
REV_FWD "F>"
```

The MASTER indicates that it is ready to accept a message by answering
the SLAVE's PROMPT, ">", with a REV_FWD command, "F>". At that point the
SLAVE issues a SEND_CMD and the process continues as described in
section 2 but with the rolls of MASTER and SLAVE reversed. The only
difference is that the MASTER will always respond with REV_FWD in
place of PROMPT to indicate successful transfer.

REV_FWD = "F>" EOL

The reverse forwarding phase is optional and is under the control of
the MASTER. It can be terminated by any of the following:

SLAVE disconnects

SLAVE sends anything other than a legal SEND_CMD

MASTER disconnects

MASTER sends anything other than "F>".

Section 4 - Forwarding to old BBSs

If the SLAVE does not return a SID then it is assumed that it will
not support BIDs nor OK/NO message rejection.

The SLAVE indicates it is prepared to accept a command by issuing a
PROMPT. This PROMPT is also an acknowledgement that the last message
has been received.

The MASTER initiates the message exchange by issuing a SEND_CMD with no HLOC or BID. The SLAVE has no way to reject the message so the MASTER proceeds to send the message subject and body without expecting acknowlegement from the SLAVE.

Since the SLAVE assumes a user is entering the message, it will display prompts to lead the user through the message sending process, asking for a subject, prompting for the message body, etc. The MASTER should consider this text to be part of the PROMPT and ignore it.

As in Section 2, the MASTER waits until PROMPT is received. This is the acknowledgement that the message has been recieved and the next message can be sent.

When the MASTER has no additional messages to send it disconnects from the SLAVE. Reverse forwarding is not supported in this situation.

Section 5 - Error Conditions

When an error of any nature is detected by either the MASTER or the SLAVE, that station will disconnect at once, without issuing a PROMPT.

Section 6 - BNF Summary

Meta-syntactic information.

[x] = Optional Zero or one x.
(x y) = Grouping. Treat multiple tokens as single token.
<> = Set.

Characters of interest.

TAB = <0x09>
LF = <0x0a>
CR = <0x0d>
CNTRL_Z = <0x1a>
SP = <0x20>

Character sets of interest.

ALPHA = <'A' - 'Z', 'a' - 'z'>
DIGIT = <'0' - '9'>
ALNUM = ALPHA | DIGIT
ASCII = <0x20 - 0xff>
SPACE = SP | TAB
8BIT = <0x01 - 0xff, except CR, LF, CTRL_Z>

Character sequences of interest.

EOL = CR | CR LF

NUMBER = DIGIT | NUMBER DIGIT
WHITE = SPACE | WHITE SPACE

ASCII_STR = ASCII | ASCII_STR ASCII
ALNUM_STR = ALNUM | ALNUM_STR ALNUM

```
8BIT_STR = 8BIT | 8BIT_STR 8BIT

System identifier syntax.

AUTHOR_ID = <ASCII_STR, except '[', ']', '-'>
AUTHOR_DATA = <ASCII_STR, except '[', ']'>
FEATURE = ALPHA [DIGIT]
FEATURE_LIST = FEATURE | FEATURE_LIST FEATURE
SID = "[" AUTHOR_ID ["-" AUTHOR_DATA] "-" FEATURE_LIST "]" EOL

System Prompt syntax.

COMMENT = <ASCII_STR, except '>'>
PROMPT = [COMMENT] ">" EOL

Send Command syntax.

TYPE = 'B' | 'P' | 'T'
CALLSIGN = <ASCII_STR, except '@', '.', max length 6>
LOC = <ASCII_STR, except '@', '.', max length 6>
HLOC = <LOC | HLOC "." LOC, max length 31>
BBS = CALLSIGN ["." HLOC]
TO = CALLSIGN [("@" | WHITE "@" WHITE) BBS]
FROM = CALLSIGN
BID = <ASCII_STR, max length 12>
SEND = "S" TYPE WHITE TO [WHITE "<" WHITE FROM] [WHITE "$" [BID]]

Message syntax.

SUBJECT = <ASCII_STR, max length 79> EOL

YEAR = DIGIT DIGIT
MONTH = DIGIT DIGIT
DAY = DIGIT DIGIT
HOUR = DIGIT DIGIT
MINUTE = DIGIT DIGIT
STAMP = "R:" YEAR MONTH DAY "/" HOUR MINUTE
MSG_NUM = <NUMBER, range 1 - 65535>
HEADER1 = STAMP WHITE MSG_NUM "@" BBS EOL
HEADER2 = STAMP WHITE "@:" BBS WHITE [ASCII_STR] "#:" MSG_NUM [ASCII_STR]
HEADER = HEADER1 | HEADER2
HEADERS = HEADER | HEADERS HEADER

BODY = 8BIT_STR | BODY EOL 8BIT_STR
EOM = (CTRL_Z EOL) | (EOL "/EX" EOL)
MESSAGE = SUBJECT [HEADERS] EOL [BODY] EOM

Standard message identification syntax.

MSG_ID = MSG_NUM "_" CALLSIGN

Section 7 - Feature Letter Use

Feature $:
```

Supports BIDs.

Feature A:

F6FBB - Acknowledge for personal messages.

Feature B:

F6FBB - Binary messages supported.

Feature C:

Obsolete: Supports automatic distribution of current date / time.
(W0RLI, K0ZXF)
Feature F:

F6FBB - Batch forwarding protocol.

Feature H:

Supports Hierarchical Location designators.

Feature I:

Some transport mechanisms do not identify the calling station in the
protocol as AX25 does. To handle this situation, a "null command"
is defined as a line beginning with ';'. This allows the sending station
to send callsigns to satisfy the regulations for station identification.

EXAMPLE

; W5SMM de W0RLI

The receiving station must ignore such lines.

Feature L:

G1nna - Compression.

Feature M:

Supports MIDs

Feature R:

AA4RE - Extended reject responses.

Feature S:

AA4RE - Extended "S" commands.

Feature X:

W0RLI - Supports ihave/iwant compressed batch forwarding.

Section 8 - Import / Export files.

Import/Export files may contain any number of messages.
Each message is terminated by "/EX" EOL

RFC-822 header use in import/export files.

The standard RFC-822 keywords which must be supported are:

To:
From:
Subject:
Message-ID:
cc:

Extension keywords which must be supported are:

X-msgtype: (W0RLI)
X-BBS-Msg-Type: (JNOS)

X-BID: (W0RLI)

X-BBS-Hold: (JNOS)
X-Forwarded-To: (JNOS)

END OF SPEC

--

Hank Oredson @ Mentor Graphics
Internet : hank_oredson@mentorg.com
Amateur Radio: W0RLI@W0RLI.OR.USA.NA

739. Re: Baycom software V 1.5? 1.4?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-15 19:36:40 UTC
From: mike@imcldn.demon.co.uk
Message-ID: <753392199snz@imcldn.demon.co.uk>
Source record: 51045

In article <BAT.93Nov13220316@gdstech.GRUMMAN.COM> bat@gdstech.GRUMMAN.COM writes:

> I have used 1.2, 1.4e, and 1.5. The latest release is quite
> better. I had numerous lockups with 1.4, and was really annoyed with
> it. BTW, the program called GP can run on a Baycom modem. You may want
> to give it a try also.

Ahhh, but you can run the G8BPQ node software on a baycom modem now, so most
things will work.....
--

Michael P Simkins | Computer programming undertaken, mail me to discuss your
G7OBS Software | requirements for COBOL, C, Pascal etc.
| Internet : mike@imcldn.demon.co.uk or mikes@m2xenix.psg.com
---
X400: /RFC-822=mike(a)imcldn.demon.co.uk/O=mhs-relay/PRMD=uk.ac/ADMD= /C=GB/
---

740. Re: Packet antenna?????

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-15 21:04:57 UTC
From: levine@mc.com
Message-ID: <2c8qtp$n27@jericho.mc.com>
Source record: 51177

```
In article 1@aurora.alaska.edu, fsrla@aurora.alaska.edu () writes:
-->What would a good 2m packet antenna
-->be??? I'm not using packet right
-->now, but hope to soon. However,
-->all I have up right now is a
-->2 element quad. Is this to weak?
-->What should I try??????
-->Thanks for the help!!!!!!!
-->-------------------------------
-->Roger Asbury WL7NT
-->FSRLA@AURORA.ALASKA.EDU
-->

Quads are a poor choice for packet.

Because of their directionality, it won't allow you to "hear"
others and will hinder others ability to "hear" you. This is
why packet is possible, everyone hears everyone else so no one
transmits while another is transmitting.

Your quad will slow down the entire frequency because of the
number of collisions it inadvertently will cause.

Get a high gain vertical antenna. There are a number of very
good colinear products on the market from Diamond, Comet etc...
(I even see one from Cushcraft in their catalog but don't know
if it is actually available yet).

---
------------------------------------------------------------
|| // ||\\ //|| //\\ //\\
|| // || \\ // || // //
||// || \\ || // //
||\\ || || || \\ === \\ ===
|| \\ || // || \\ // \\ //
|| \\ || // || \\// \\//
------------------------------------------------------------FTAC
Bob Levine KD1GG 7J1AIS VK2GYN formerly KA1JFP
levine@mc.com <--Internet email Phone(508) 256-1300 x247
kd1gg@wa1phy.ma <--Packet Mail FAX(508) 256-3599
------------------------------------------------------------
```

741. What is RATT ?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-15 22:51:24 UTC
From: gganderson@augustana.edu
Message-ID: <gganderson.122.0@augustana.edu>
Source record: 51179

In a brochure describing MARS (Military Affiliate Radio System) operations, there is a list of modes supported:

"Although high frequency (HF) single sideband (SSB) voice is predominant, there are CW, RATT, VHF, PACKET, and even slow scan TV nets."

Is RATT another way to talk about RTTY (and derivative) modes? Does it stand for "radio amateur teletype" by any chance (which I assume would reference 170hz separations to be different from the commercial separations)?

Thanks in advance.

Kevin Anderson, kb9iua
* *
Kevin L. Anderson, Geography Dept., Augustana College
Rock Island, Illinois 61201 USA phone: (309) 794-7325
e-mail: gganderson@augustana.edu or kla@helios.augustana.edu
* *

742. Re: Packet BBS spec by ARRL

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-16 01:49:22 UTC
From: Carl Makin <makinc@hhcs.gov.au>
Message-ID: <1993Nov16.114922.845@hhcs.gov.au>
Source record: 51182

In article <2c8le7$2nr@wvhpadm1.mentorg.com> Hank Oredson, hanko@wv.mentorg.com writes:
> In article <2buojv$kr9@juniper.almaden.ibm.com>, enge@enge.almaden.ibm.com writes:

>|> I received a copy of a "Final Draft" specification on packet BBS

> I too got a copy in the mail, and would like to make comments
> to the (as of yet) unknown author.

Is there any chance of seeing it in an electronic form for those of
us NOT in the US.

Carl.
--
Carl Makin (VK1KCM) "Speaking for myself only!"
makinc@hhcs.gov.au (Internet) / vk1kcm@vk1kcm.act.aus.oc (Packet Radio)
'The best book on programming for the layman is "Alice in Wonderland";
but that's because it's the best book on anything for the layman.'

743. Re: Packet antenna?????

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-16 01:50:25 UTC
From: partos@snapdragon.cs.odu.edu
Message-ID: <PARTOS.93Nov15205026@snapdragon.cs.odu.edu>
Source record: 51180

I am currently working packet with an HT and a J-pole. What about adding an amp to the system? Any suggestions? Thanks for any help.

Dick
--
|---|
| Richard D. Partos KE4AZJ Norfolk, VA |
Internet: r.d.partos@larc.nasa.gov

744. MFJ 1278 for FAX

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-16 02:43:04 UTC
From: BRUNELLI_PC@delphi.com
Message-ID: <931115.78184.BRUNELLI_PC@delphi.com>
Source record: 51181

AAAARRRRGGGHHHHHH...
I have been trying to recieve HF FAX transmissions with my 1278 to no avail.
[C

that works? Additionally, a source for skeds on fax and rtty transmissions
would be appreciated.

thanks,
pete brunelli

reply here or to BRUNELLI_PC@delphi.com

745. Re: Windows NT Packet TCP/IP

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-16 05:33:05 UTC
From: Dave@pluto.ve3ifb.ampr.org
Message-ID: <Dave.4.00008D3C@pluto.ve3ifb.ampr.org>
Source record: 51051

In article <CGLLFt.19q@wang.com> garyf@wang.com (Gary Field) writes:
>From: garyf@wang.com (Gary Field)
>Subject: Re: Windows NT Packet TCP/IP
>Date: Tue, 16 Nov 1993 18:45:28 GMT

>root@ka9qpg.ampr.org (The Owner) writes:

>>Is anyone working on a Windows NT version of AX.25??

>>Tnx Tom talley

>Although I haven't tried it myself, I would expect NOS to run in a DOS
>window under NT.

I tried it under a friends beta NT. It didn't work. Sorry I don't
have more details, no time, little interest in chasing the reason...

[deletions]

Dave

746. Re: PK-88 KISS/NOS HELP!!!

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-16 05:43:28 UTC
From: Dan Raneri N2OQN <DCR117@psuvm.psu.edu>
Message-ID: <93320.004328DCR117@psuvm.psu.edu>
Source record: 51183

A modification is required of the PK-88, which is required for Hardware Handshaking; necessary for proper operation in KISS mode... I am not sure what it is. (I did it to mine, but I can't remember...) If you contact AEA about it, I am sure they can direct you properly, or maybe a fellow netter can help you out...

Hope this helps...

73,
Danny (N2OQN)

747. RTTY on the PC

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-16 10:29:30 UTC
From: Jason_Phillips@europe.notes.pw.com
Message-ID: <9311161023.AA12912@pwtc.tc.pw.com>
Source record: 51184

Does anyone know of any good Shareware, Public Domain or realy dirt-cheap software to enable me to recieve RTTY on my PC compatible?

I have an Amstrad 2386 computer running DOS 6 and Windows 3.1

Any help/advice on converting the audio output from my shortwave reciever to the serial input of my PC would also be most welcome.

I specify Dirt-Cheap because "money to tight to mention" at the moment and I'm limited to around $20 !

I am not able to read this newsgroup because I'm posting via a gateway and therefore would vastly prefer email responses. Our technical bofins tell me that the following address should work:

>INTERNET:JASON_PHILLIPS@NOTES.PW.COM

Thank's in advance,
Jason

748. Re: wb7tpy gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-16 11:02:41 UTC
From: kenji@k2r.or.jp
Message-ID: <KENJI.93Nov16200241@reseau.k2r.or.jp>
Source record: 51186

In article <cowart.753383276@neptune> cowart@convex.com (Michael Cowart) writes:
|however, today I tried to send one to another ham, and the local mailer deamon
|can't find "gate@wb7tpy.az.usa.na"

NEVER USE HAM RADIO PACKET DOMAIN ADDRESS ON THE INTERNET, PLEASE.
Note especially for North American stations: .NA is assigned to
Namibia, which does not have enough bandwidth to accept error mail
messages.

I strongly urge RLI/MBL/whatever BBS systems to use a pseudo domain
for themselves, and to QUIT using something quite confusing
IMMEDIATELY.

// Kenji
--
Kenji Rikitake <kenji@k2r.or.jp> <kenji@rcac.astem.or.jp> (More available!)
Persuade me you may, but I won't be persuaded. -- Aristophanes

749. Re: Packet antenna?????

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-16 14:32:35 UTC
From: bat@gdstech.GRUMMAN.COM
Message-ID: <BAT.93Nov16093235@gdstech.GRUMMAN.COM>
Source record: 51185

A jpole is a good choice for an antenna, if it's up reasonably high.
So, some power would help. I have used a ramsey 2m amp on packet
with my HT many times. It puts 20 watss out if you give it 1,
and 30 out for 5 in. But, there are guuys saying that the signal
isnt too clean. One guy said here, that of the 20 watts out,
a couple of them might actually be on the same frequency as my
HT is transmitting. If you do use an amp, there is the added
delay of switching from receive to transmit state. So, add
a little to your TXDelay parameter. Try about a third of a
second, and work down.
--
--
* Pat Masterson D12-25 | KE2LJ@KC2FD *
* Grumman Data Systems | 516-346-6316. *
* Bethpage, NY 11746 | bat@gdstech.grumman.com *

750. Re: wb7tpy gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-16 15:51:30 UTC
From: drs@ccd.harris.com
Message-ID: <1993Nov16.155130.27663@ccd.harris.com>
Source record: 51187

Michael Cowart (cowart@convex.com) wrote:

: Last Friday, after seeing the article aboout the wb7tpy gateway, I successfully sent a
: message to myself via a local switch.

: however, today I tried to send one to another ham, and the local mailer deamon
: can't find "gate@wb7tpy.az.usa.na"

: Is this the right address? I can't find the original post.

: please help!

: Mike
: WA5CMI

I think it is: gate@wb7tpy.ampr.org for internet to packet. First line
contains Packet:(packet calll/address)

Doug

751. Re: What is RATT ?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-16 16:04:17 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1993Nov16.160417.21622@ke4zv.atl.ga.us>
Source record: 51041

In article <gganderson.122.0@augustana.edu> gganderson@augustana.edu (Kevin Anderson
-7325) writes:
>
>Is RATT another way to talk about RTTY (and derivative) modes?
>Does it stand for "radio amateur teletype" by any chance (which
>I assume would reference 170hz separations to be different
>from the commercial separations)?

Yes, RATT, RAdio TeleType, is the military acronym for what we
hams call RTTY.

Gary
--
Gary Coffman KE4ZV | Life's a journey, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | not a destination. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Live it. | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

752. Globe Data

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-16 16:49:29 UTC
From: nat@kpc.com
Message-ID: <1993Nov16.164929.27828@kpc.com>
Source record: 51189

Hi,
I am looking for globe data in electronic form (country boundaries
continents etc.) I just put up a beam and I would like to create a
Equidistant Azimuth Projection map for my QTH.
Thanks in advance.
Nat.

--

Natarajan Gurumoorthy AB6SJ Kubota Pacific Computer, Inc.
nat@kpc.com 2630 Walsh Avenue
Phone 408 987 3341 Santa Clara, California 95051.

753. Re: wb7tpy gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-16 16:50:43 UTC
From: burke_br@adcae1.comm.mot.com
Message-ID: <1993Nov16.165043.25831@lmpsbbs.comm.mot.com>
Source record: 51044

In article 753383276@neptune, cowart@convex.com (Michael Cowart) writes:
}
}Last Friday, after seeing the article aboout the wb7tpy gateway, I successfully sent a
}message to myself via a local switch.
}
}however, today I tried to send one to another ham, and the local mailer deamon
}can't find "gate@wb7tpy.az.usa.na"
}
}Is this the right address? I can't find the original post.
}
}please help!
}
}Mike
}WA5CMI
}

The internet address you are looking for is:

gate@wb7tpy.ampr.org

The address:

gate@wb7tpy.az.usa.na is only for the packet side.

Bruce, WB4YUC

754. Re: MAKE.MONEY.FAST

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-16 16:52:02 UTC
From: eeyimkn@unicorn.nott.ac.uk
Message-ID: <2cb0fi$mkc@unicorn.ccc.nottingham.ac.uk>
Source record: 51188

In article <753035641snx@skyld.tele.com> jangus@skyld.tele.com (Jeffrey D. Angus) writes:
>In article <93312.210451KRT105@psuvm.psu.edu> KRT105@psuvm.psu.edu writes:
> > Dear Friend,
(snicker-snack)
> > -- Kevin Trigger
>
> This worthless bag of excrement needs to be taken out behind the network and
> beat to death with a pile of printouts.

Or, possibly, with a copy of the postings from news.announce.newusers - they specifically frown on such things as this. I get a feeling someone got prosecuted a couple of years back for some reason concerning these things, so hey, kids, just say no!
Chain letters on the net are _frowned_ upon <frown> so if this bod wants to keep any friends on the net, or possibly their liberty, if the legal thing is true, it might not be a good idea to send one out.

And now, back to your regular programming.

ObPacket: G7GPA > G9FOO SABM[P]

73 Mike

--
+- Mike Knell, University of Nottingham, UK -=- eeyimkn@unicorn.nott.ac.uk --+
| --THIS SPACE TEMPORARILY BLANK-- | AMPR: g7gpa@hobbes.g7gpa.ampr.org |
| (until I can think of a decent joke)| AX25: g7gpa@g7gpa.gb7bad.#23.gbr.eu |
|UNDER the overpass! OVER the underpass! Around the future and BEYOND REPAIR!|

755. Re: Packet antenna?????

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-16 17:33:00 UTC
From: Burt.Kaufman@f40.n382.z1.fidonet.org
Message-ID: <753498110.AA00212@afarm.uucp>
Source record: 51053

-=> Quoting Fsrla to All <=-

Fs> What would a good 2m packet antenna be??? I'm not using packet right
Fs> now, but hope to soon. However, all I have up right now is a 2 element
Fs> quad. Is this too weak? What should I try? Thanks for the help!
Fs> Roger Asbury WL7NT
In general, if you are sharing the frequency with others, you should
use a non-directional antenna. Packet works best when everybody can
hear everybody.

I use a Diamond F-22A (two 7/8 wave elements in a white fiberglass shell).
Claimed 6.7 dB gain, 10.5 feet tall, 200 watts, 112 mph winds. Cost about
$100. Wish I'd bought a dual band model though. Maybe the X-300A?

... "America has no criminal class except her Congress." - Mark Twain
___ Blue Wave/QWK v2.12

756. Re: Where Can I Get Lan-Link

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-16 17:51:03 UTC
From: Dale.Hazelwood@launchpad.unc.edu
Message-ID: <2cb3u7$kp3@samba.oit.unc.edu>
Source record: 51040

Lan-Link can be obtained from G3ZCZ's BBS in MD.
(301)593-9067 2400 8N1
He has all the latest versions and other software that he has written.

73...Dale, NH6CI

////
(. .)
-----------oOO-(_)OOo----------
Dale E. Hazelwood	O THERE IS VERY LITTLE O
Springfield, VA	O DIFFERENCE BETWEEN O
(703) 764-0258	O STEPPING STONES AND O
daleh@baileys-emh1.army.mil	O STUMBLING BLOCKS O
-------------OO---OO----------

--
The opinions expressed are not necessarily those of the University of
North Carolina at Chapel Hill, the Campus Office for Information
Technology, or the Experimental Bulletin Board Service.
internet: laUNChpad.unc.edu or 152.2.22.80

757. Packet BBS for UNIX

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-16 18:25:14 UTC
From: lawrence@combdyn.com
Message-ID: <1993Nov16.182514.11244@combdyn.com>
Source record: 51057

I'm looking for a Packet BBS for UNIX. I don't know what kind of UNIX box it is yet. I'm setting up a Packet BBS for a school district (7 schools), and the possibility exists that a UNIX box might be donated to the cause.

Otherwise I need one for an HP48SX 8-)

Preferrably the BBS should support FBB compressed forwarding....since its somewhat of local convention around here now.

I'd also be interested in finding pointers to the latest source code to CBBS...

--
--EMAIL----------------------------PHONE-----------FAX------------
| WORK: lawrence@combdyn.com | (403)529-2162 | (403)529-2516 | CallSign
| HOME: dreamer@lhaven.uumh.ab.ca | (403)526-6019 | (403)529-5102 | VE6LKC
----
disclamer = (working_for && !representing) + (Combustion Dynamics Ltd.);

758. Re: Windows NT Packet TCP/IP

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-16 18:45:28 UTC
From: garyf@wang.com
Message-ID: <CGLLFt.19q@wang.com>
Source record: 51047

root@ka9qpg.ampr.org (The Owner) writes:

>Is anyone working on a Windows NT version of AX.25??

>Tnx Tom talley

Although I haven't tried it myself, I would expect NOS to run in a DOS window under NT.
I certainly would be happy to hear that someone had written a NDIS driver for KISS for NT however. Then all we would need is a SMTP daemon, a decent finger, a decent telnet etc,... :-)

Gary
--
--/* Gary A. Field - WA1GRC, Wang Labs M/S 019-72B, 1 Industrial Ave
Lowell, MA 01851-5161, (508) 967-2514, email: garyf@wiis.wang.com, EST5EDT
A waist is a terrible thing to mind! */

759. Re: Packet BBS spec by ARRL

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-16 18:50:11 UTC
From: hanko@wv.mentorg.com
Message-ID: <2cb7d3$93l@wvhpadm1.mentorg.com>
Source record: 51042

In article <1993Nov16.114922.845@hhcs.gov.au>, Carl Makin <makinc@hhcs.gov.au> writes:
|> In article <2c8le7$2nr@wvhpadm1.mentorg.com> Hank Oredson, hanko@wv.mentorg.com writes:
|> > In article <2buojv$kr9@juniper.almaden.ibm.com>, enge@enge.almaden.ibm.com writes:
|>
|> >|> I received a copy of a "Final Draft" specification on packet BBS
|>
|> > I too got a copy in the mail, and would like to make comments
|> > to the (as of yet) unknown author.
|>
|> Is there any chance of seeing it in an electronic form for those of
|> us NOT in the US.
|>
|>
|> Carl.
|> --
|> Carl Makin (VK1KCM) "Speaking for myself only!"
|> makinc@hhcs.gov.au (Internet) / vk1kcm@vk1kcm.act.aus.oc (Packet Radio)
|> 'The best book on programming for the layman is "Alice in Wonderland";
|> but that's because it's the best book on anything for the layman.'

As far as I know, the "ARRL paper" version does not exist in electronic
form. The current working draft that all us BBS code authors are using,
does, and I will post what I have so that all can see what it is like.

This will be my own version of the working draft.
It will contain mainly things agreed by all authors, but will have
additional information "still in process" ...

... Hank

--

Hank Oredson @ Mentor Graphics
Internet : hank_oredson@mentorg.com
Amateur Radio: W0RLI@W0RLI.OR.USA.NA

760. BBS specification

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-16 18:54:08 UTC
From: hanko@wv.mentorg.com
Message-ID: <2cb7kg$93l@wvhpadm1.mentorg.com>
Source record: 51043

```
Changes:

CTL-C not really restricted character?
LF not used as alternate EOL
Added info from AA4RE on "M in SID".

... Hank

BBS Interface Specification
Working Draft
11/13/93

Introduction
Section 1 - Establishing connection
Section 2 - Forwarding
Section 3 - Reverse forwarding
Section 4 - Forwarding to old BBSs
Section 5 - Error Conditions
Section 6 - BNF Summary
Section 7 - Feature Letter Use

Current mailing list
BBS_authors@arasmith.com

bob@arasmith.com (Bob Arasmith, N0ARY)
hank_oredson@mentorg.com (Hank Oredson, W0RLI)
wd6cmu@netcom.com (Eric Williams, WD6CMU)
enge@almaden.ibm.com (Roy Engehausen, AA4RE)
71151.720@CompuServe.COM (Victor Poor, W5SMM)
blloyd@axion.bt.co.uk (Brian Lloyd, G1NNA)
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durham@w2xo.pgh.pa.us (James Durham, W2XO)
johan@ece.orst.edu (Johannes Reinalda, WG7J)
trentin@enac.dgac.fr (to J-P Roubelat, F6FBB)
sproul@sproul.com (Mark Sproul, KB2ICI)
mike@km6px.arasmith.com (Mike Stickney, KM6PX)
70007.1365@compuserve.com (Ed Juge, W5TOO)
73126.3260@compuserve.com (Craig McCartney, WA8DRZ)

Via US Mail
Michael Jaggers, WB4TTZ
1377 Columbia Ave, Franklin, TN 37064

Introduction -
This document is meant to define the interaction between two BBSs
exchanging messages. It is not the goal of the document to specify
the interface of the future but merely represent what a BBS can be
```

expected to see at the current time.

It is hoped that this specification will be followed by another that defines the base rules for all BBS programs to adopt. This should eliminate the current problems with incompatibilities and overloaded operators. If you create a BBS to this specification you should be able to interconnect with virtually any BBS currently in use. Any extensions you add will put you at risk, the subsequent spec is to identify these areas.

In brief the following sequence of events takes place when the BBSs connect for forwarding:

```
Master System Slave System
------------ --------------
{Connect}
[SID]
N9ZZZ >

[SID]

>

SB ARES @ ALLCA < W7ZZZ $ARES0108

OK

message subject
message routing headers
message body
/EX

>

SB WANT @ ALLUS < W8AAA $1029_N0XYZ

NO
>

F>

SP WA2ABC @ N2AAA < N9AAA

OK

message subject
message routing headers
message body
/EX

F>

{Disconnect}
```

This represents a simple example of connecting, establishing a common protocol, forwarding and reverse forwarding. This document will look

more closely at each of these phases.

In the text the BBS initiating the connect will be referred to as the MASTER and the remote BBS will be referred to as the SLAVE.

Each command and exchange will be presented in BNF (Backus-Naur Form) which is a context-free grammar widely used to describe computer language syntax.

All commands and fields are case insensitive.

Meta-syntactic information

[x] = Optional: zero or one x
(x y) = Grouping: treat multiple tokens as a single token
<> = Set

Characters:

NUL = <0x00>
CNTRL_C = <0x03>
TAB = <0x09>
CR = <0x0D>
LF = <0x0A>
CNTRL_Z = <0x1A>
SP = <0x20>

Character sets:

ALPHA = <'A'-'Z'>
DIGIT = <'0'-'9'>
ALNUM = ALPHA | DIGIT
ASCII = <0x20-0xFF>
SPACE = SP | TAB
8BIT = <0x01 - 0xff, except CR, LF, CTRL_Z>

Character sequences:

EOL = CR | CR LF

NUMBER = DIGIT | NUMBER DIGIT
WHITE = SPACE | WHITE SPACE

ASCII_STR = ASCII | ASCII_STR ASCII
ALNUM_STR = ALNUM | ALNUM_STR ALNUM
8BIT_STR = 8BIT | 8BIT_STR 8BIT

Throughout this document we will present a verbose translation of the grammar highlighting any points that may not be obvious but could have significant affect. There will also be examples illustrating what can actually be expected.

Section 1 - Establishing connection

When connecting to a BBS the first line the BBS sends must be the
SID (System IDentifier). The SID is used to determine what features
are supported by BBS. The existence of the SID implies that the system
supports reverse forwarding and OK/NO message rejection. There still
exist old BBS codes which do not present a SID at connect. Refer to
Section 4 for information on forwarding to these old style BBS sytems.

SID sent by both MASTER and SLAVE

AUTHOR_ID = <ASCII_STR, except '[', ']' and '-'>
AUTHOR_DATA = <ASCII_STR, except '[' and ']'>
FEATURE = ALPHA [DIGIT]
FEATURE_LIST = FEATURE | FEATURE_LIST FEATURE
SID = "[" AUTHOR_ID "-" [AUTHOR_DATA "-"] FEATURE_LIST [$]"]" EOL

The AUTHOR_ID and FEATURE_SET must be present. If the optional
AUTHOR_DATA is present it must be separated from the other two
fields by a '-'. AUTHOR_DATA may contain the '-' character.

The AUTHOR_ID and AUTHOR_DATA are typically a portion of the authors
callsign or BBS name and version number, respectively.

Each FEATURE consists of a letter, denoting the feature and an
optional number, denoting the feature level. The absence of a
version number implies version zero.

If BID's are supported, '$' must be the last symbol in the FEATURE_SET.

The recommended minimal support is BID and Hierarchical location
identifiers. These are necessary for the proper operation of the network.

EXAMPLE

[ZFJ-2.3-H$]

The original prompt received from the SLAVE BBS may contain additional
information intended for users. As soon as the SID is received by the
SLAVE BBS it should respond with an abbreviated PROMPT, with the
ASCII_STR field being empty.

Section 2 - Forwarding

A message can either be rejected or accepted by the SLAVE. There are
many reasons that the SLAVE my choose to reject a message but the most
common will be duplicate bid, indicating the SLAVE already has the message.
Here is an overview of the exchange.

ACCEPT EXCHANGE:

MASTER SLAVE
------ -----
PROMPT
SEND_CMD
RESPONSE (OK)
MESSAGE
COMMENT

PROMPT

REJECT EXCHANGE:

MASTER SLAVE
------ -----
PROMPT
SEND_CMD
RESPONSE (NO)
PROMPT

The SLAVE indicates it's prepared to accept a command by issuing a PROMPT.
The PROMPT is also used as an an acknowledgement that the last message
has be received.

The MASTER initiates the message exchange by issuing a a SEND_CMD. This
command contains all the information necessary for the SLAVE to decide
whether to ACCE or REJECT the message. It contains message type,
destination, originator and possibly a bid.

COMMENT = <ASCII_STR, except '>'>
PROMPT = [COMMENT] ">" EOL

TYPE = 'B' | 'P' | 'T'
CALLSIGN = <ASCII_STR, except '@', '.', max length 6>
LOC = <ASCII_STR, except '@', '.', max length 6>
HLOC = LOC | <HLOC "." LOC, max length 31>
BBS = CALLSIGN ["." HLOC]
TO = CALLSIGN [WHITE "@" WHITE BBS]
FROM = CALLSIGN
BID = <ASCII_STR, max length 12>

SEND_CMD = "S" TYPE WHITE TO [WHITE "<" WHITE FROM] [WHITE "$" BID]

HLOC is the hierarchical location of the system. It is defined by
the document "INTERNATIONAL ROUTING DESIGNATORS", ARRL Networking
Conference Proceedings xxx.

The TO field commonly takes the following forms:

callsign @ BBS.hloc ; N6ZFJ @ N6QMY.CA.USA.NA
category @ distrib ; WANT @ ALLCA
category @ BBS.hloc ; WANT @ N6QMY.CA.USA.NA
category @ distib.hloc ; INFO @ ALLCA.CA.USA.NA

The first two are seen most often, but the other two forms are seen.
The first two forms are also normally associated with the
message type of PERSONAL and BULLETIN respectively.

White space is required on either side of the '@' and between the
'<' and the senders callsign. There cannot be white space between
the '$' and the BID.

EXAMPLE

SB WANT @ ALLSCV < N6ZFJ $2345_N6QMY

A "BID" (Bulletin IDentifier) is associated with each Bulletin,
and may be associated with any Personal message.

If a BID is not given explicitly when the message is entered into
the system, and the message type requires a BID, one is created
automatically from the message number and callsign of the system
into which the message was initially entered.

NOTE:

It is suggested that a generated BID have the form nnn_BBS,
where nnn is the message number at the originating BBS system,
and BBS is the callsign of the originating BBS system.

COMMON_BID = MSG_NUM "_" CALLSIGN

BBS codes are free to create whatever form they wish as long as the
length doesn't exceed 12 characters.

Messages to a distribution, whether they are bulletins or personal
messages, must have a BID. Personal messages to a specific user may
carry a BID if the user supplied one, but will not be given a default
BID. NTS message never carry a BID.

The SLAVE BBS determines from the SEND_CMD whether or not to accept
the message. The reasons for rejection is usually that the message
already exists on the SLAVE system (i.e. a duplicate BID), or possibly
a system related problem.

Sent by SLAVE in response to SEND_CMD (or by MASTER if in reverse
forward mode).

RESPONSE = ACCEPT | REJECT

ACCEPT = "OK" [WHITE COMMENT] EOL

REJECT = "N" ["O"] [WHITE COMMENT] EOL

NOTE:
The syntax of responses has grown in a random fashion. Many BBS programs
expect to see the entire words "OK" and "NO" while others simply look
at the first letter. It is suggested that new BBS codes should present the
words "NO" and "OK", but look for only the first letter. Doing so should
ensure compatibility with existing BBS codes.

EXAMPLE
Master: SB WANT @ ALLCAN < N6ZFJ $4567_N0ARY
Slave: NO duplicate bid
Slave: >

Master: SB WANT @ ALLCAN < N6ZFJ $4567_N0ARY
Slave: OK #32190
Master: message body
Master: /EX

```
Slave: Message being held for sysop review
Slave: >

It is required that the "OK" and "NO" strings be followed by white
space or EOL. Some BBS programs will fail to recognize them otherwise.

EXAMPLE
Master: SB WANT @ ALLCAN < N6ZFJ $4567_N0ARY
Slave: NO, already have it
Slave: >

This would fail with some existing BBS codes due to
the comma following the "NO" string.

If the SLAVE BBS responds with a REJECT condition the message should
not be sent and the MASTER should ignore any response from the SLAVE
until PROMPT is encountered. The MASTER can then submit a new SEND_CMD,
initiate reverse forwarding or disconnect.

Once the SLAVE has issued the ACCEPT response, the MASTER BBS
should immediately send the message subject, routing headers,
message body and EOM. The SLAVE will acknowledge with PROMPT
once it receives an EOM.

Message Routing Header

SUBJECT = <ASCII_STR, max length 79> EOL
YEAR = DIGIT DIGIT
MONTH = DIGIT DIGIT
DAY = DIGIT DIGIT
HOUR = DIGIT DIGIT
MINUTE = DIGIT DIGIT

STAMP = "R:" YEAR MONTH DAY "/" HOUR MINUTE ["Z"]
MSG_NUM = <NUMBER, range 1 - 65535 (0xFFFF)>

HEADER1 = STAMP WHITE MSG_NUM "@" BBS EOL
HEADER2 = STAMP WHITE "@:" BBS WHITE [ASCII_STR] "#:" MSG_NUM [ASCII_STR]
HEADER = HEADER1 | HEADER2

Message structure

HEADERS = HEADER | HEADERS HEADER
EOM = (CNTRL_Z EOL) | (EOL "/EX" EOL)
BODY = 8BIT_STR | BODY EOL 8BIT_STR
MESSAGE = SUBJECT [HEADERS] EOL [BODY] EOM

EXAMPLE

Example message
R:930108/1729 @:N6QMY.#NOCAL.CA.USA.NA Fremont #:1114 Z:94536
R:930108/1259 1530@KA6FUB.#NOCAL.CA.USA.NA
R:930107/1638z @:WD6CMU.#NOCAL.CA.USA.NA "OSKbox" #:10576 Z:94805
R:930107/1045 50724@WX3K.#NOCAL.CA.USA.NA
```

message body will go here, the blank line above separates the
body from the routing headers. When the body is through it should be
terminated as follows:
/EX

NOTE:
Both forms of the header described above are seen, and should be parsed.
In either case there may be comments found at the end of the header line,
or between the BBS and the MSG_NUM entries in HEADER2.

HEADER2 is derived from the header form used in early BBS codes.
it allows addtional information to be passed in the header and parsed
if desired. Some examples of these additional fields seen are:

Z:zipcode
O:orginator
$:bid
C:name_of_sysops_cat

NOTE:
The time stamp in the routing header must be in GMT. Some existing BBS
codes provide the time stamp in other than GMT, and may include a time
zone indicator after the time stamp. This should be considered in the
design of header parsers.

Each system that handles the message places it's routing header
at the top of the message headers before passing the message to
the next BBS. The headers must begin in column 1. A blank line
separates the routing headers from the body of the message.

The last (oldest) routing header shows the BBS where the message
originated. This header is the only source for this information.
The information about the originating BBS is used to create a
return address for reply messages.

Here are two examples of the same header, in the two different formats:

R:930101/0000 1530@KA6FUB.#NOCAL.CA.USA.NA
R:930101/0000 @:KA6FUB.#NOCAL.CA.USA.NA #:1530

These examples show the different syntax for the message number and
originating BBS address. All fields not shown in the examples are
optional at the discretion of the sysop.

Section 3 - Reverse forwarding

Once all messages have either been successfully forwarded from the MASTER
to the SLAVE, or been rejected by the SLAVE, the MASTER may accept
messages from the SLAVE. i.e. the MASTER and SLAVE exchange roles.
This is called "reverse forwarding".

ACCEPT EXCHANGE:

MASTER SLAVE
------ -----

```
PROMPT ">"
REV_FWD "F>"
SEND_CMD
RESPONSE "OK"
MESSAGE
COMMENT
REV_FWD "F>"

REJECT EXCHANGE:

MASTER SLAVE
------ -----
PROMPT ">"
REV_FWD "F>"
SEND_CMD
RESPONSE "NO"
REV_FWD "F>"

The MASTER indicates that it is ready to accept a message by answering
the SLAVE's PROMPT, ">", with a REV_FWD command, "F>". At that point the
SLAVE issues a SEND_CMD and the process continues as described in
section 2 but with the rolls of MASTER and SLAVE reversed. The only
difference is that the MASTER will always respond with REV_FWD in
place of PROMPT to indicate successful transfer.

REV_FWD = "F>" EOL

The reverse forwarding phase is optional and is under the control of
the MASTER. It can be terminated by any of the following:

SLAVE disconnects

SLAVE sends anything other than a legal SEND_CMD

MASTER disconnects

MASTER sends anything other than "F>".

Section 4 - Forwarding to old BBSs

If the SLAVE does not return a SID then it is assumed that it will
not support BIDs nor OK/NO message rejection.

The SLAVE indicates it is prepared to accept a command by issuing a
PROMPT. This PROMPT is also an acknowledgement that the last message
has been received.

The MASTER initiates the message exchange by issuing a SEND_CMD with no
HLOC or BID. The SLAVE has no way to reject the message so the MASTER
proceeds to send the message subject and body without expecting
acknowlegement from the SLAVE.

Since the SLAVE assumes a user is entering the message, it will display
prompts to lead the user through the message sending process, asking for
a subject, prompting for the message body, etc. The MASTER should
```

consider this text to be part of the PROMPT and ignore it.

As in Section 2, the MASTER waits until PROMPT is received. This is the acknowledgement that the message has been recieved and the next message can be sent.

When the MASTER has no additional messages to send it disconnects from the SLAVE. Reverse forwarding is not supported in this situation.

Section 5 - Error Conditions

When an error of any nature is detected by either the MASTER or the SLAVE, that station will disconnect at once, without issuing a PROMPT.

Section 6 - BNF Summary

Meta-syntactic information.

[x] = Optional Zero or one x.
(x y) = Grouping. Treat multiple tokens as single token.
<> = Set.

Characters of interest.

TAB = <0x09>
LF = <0x0a>
CR = <0x0d>
CNTRL_Z = <0x1a>
SP = <0x20>

Character sets of interest.

ALPHA = <'A' - 'Z', 'a' - 'z'>
DIGIT = <'0' - '9'>
ALNUM = ALPHA | DIGIT
ASCII = <0x20 - 0xff>
SPACE = SP | TAB
8BIT = <0x01 - 0xff, except CR, LF, CTRL_Z>

Character sequences of interest.

EOL = CR | CR LF

NUMBER = DIGIT | NUMBER DIGIT
WHITE = SPACE | WHITE SPACE

ASCII_STR = ASCII | ASCII_STR ASCII
ALNUM_STR = ALNUM | ALNUM_STR ALNUM
8BIT_STR = 8BIT | 8BIT_STR 8BIT

System identifier syntax.

AUTHOR_ID = <ASCII_STR, except '[', ']', '-'>
AUTHOR_DATA = <ASCII_STR, except '[', ']'>
FEATURE = ALPHA [DIGIT]
FEATURE_LIST = FEATURE | FEATURE_LIST FEATURE

```
SID = "[" AUTHOR_ID ["-" AUTHOR_DATA] "-" FEATURE_LIST "]" EOL
```

System Prompt syntax.

```
COMMENT = <ASCII_STR, except '>'>
PROMPT = [COMMENT] ">" EOL
```

Send Command syntax.

```
TYPE = 'B' | 'P' | 'T'
CALLSIGN = <ASCII_STR, except '@', '.', max length 6>
LOC = <ASCII_STR, except '@', '.', max length 6>
HLOC = <LOC | HLOC "." LOC, max length 31>
BBS = CALLSIGN ["." HLOC]
TO = CALLSIGN [("@" | WHITE "@" WHITE) BBS]
FROM = CALLSIGN
BID = <ASCII_STR, max length 12>
SEND = "S" TYPE WHITE TO [WHITE "<" WHITE FROM] [WHITE "$" [BID]]
```

Message syntax.

```
SUBJECT = <ASCII_STR, max length 79> EOL
```

```
YEAR = DIGIT DIGIT
MONTH = DIGIT DIGIT
DAY = DIGIT DIGIT
HOUR = DIGIT DIGIT
MINUTE = DIGIT DIGIT
STAMP = "R:" YEAR MONTH DAY "/" HOUR MINUTE
MSG_NUM = <NUMBER, range 1 - 65535>
HEADER1 = STAMP WHITE MSG_NUM "@" BBS EOL
HEADER2 = STAMP WHITE "@:" BBS WHITE [ASCII_STR] "#:" MSG_NUM [ASCII_STR]
HEADER = HEADER1 | HEADER2
HEADERS = HEADER | HEADERS HEADER
```

```
BODY = 8BIT_STR | BODY EOL 8BIT_STR
EOM = (CTRL_Z EOL) | (EOL "/EX" EOL)
MESSAGE = SUBJECT [HEADERS] EOL [BODY] EOM
```

Standard message identification syntax.

```
MSG_ID = MSG_NUM "_" CALLSIGN
```

Section 7 - Feature Letter Use

Feature $:

Supports BIDs.

Feature A:

F6FBB - Acknowledge for personal messages.

Feature B:

F6FBB - Binary messages supported.

Feature C:

Obsolete: Supports automatic distribution of current date / time.
(W0RLI, K0ZXF)
Feature F:

F6FBB - Batch forwarding protocol.

Feature H:

Supports Hierarchical Location designators.

Feature I:

Some transport mechanisms do not identify the calling station in the
protocol as AX25 does. To handle this situation, a "null command"
is defined as a line beginning with ';'. This allows the sending station
to send callsigns to satisfy the regulations for station identification.

EXAMPLE

; W5SMM de W0RLI

The receiving station must ignore such lines.

Feature L:

G1nna - Compression.

Feature M:

For AA4RE systems:

Basic level ("M0")
MID = message identifier
Every message has a MID.
The MID looks like a "generated" BID (example 12345_AA4RE).
The "M" letter in the SID indicates that a MID is to be transmitted
with messages that have no BID.

Processing:

If a send command is received by a BBS with a MID, the program
should determine if it is a duplicate. If it is, the program
should respond with the usual "NO" as if it was matching a BID.

Feature R:

AA4RE - Extended reject responses.

OK
Yes, send to me. Note that no number is required. This may
help eliminate phantom message numbers.

NO
This is a real dupe
REJECT

I can't handle this
LATER
Send to me later ...

The LATER is useful when you are already receiving a bulletin on one
connect and someone else tries to send you the same bulletin.

REJECTed messages should be called to the attention of the SYSOP
to see why the reject occurs.

The difference between NO and REJECT is whether or not SYSOP attention
is needed.

Abreviations are alloed: 1 Letter only ... O N L R

There must be a blank after the word or letter. This one is fine:
N Already have it.
This one is not correct:
REJECT, Something wrong
The comma is not allowed.

Feature S:

AA4RE - Extended "S" commands.

Feature X:

W0RLI - Supports ihave/iwant compressed batch forwarding.

A standard for Data compression during the forwarding
of messages in the Amateur Radio BBS Network.

o ihave/iwant variable batch size protocol
o Feature letter X, commands SS, SX, SY.
o lzh compression

Command Definitions and BNF description.

N = INTEGER, size 32 bits.
protocol = TBD
batch_size = N
file_size = N
msg_count = <0 - 25>

id = BID | MID CR
ids = id | ids id

byte = <0x00 - 0xff)
bytes = byte | bytes byte

ihave = "SX " msg_count [" " protocol] [" " batch_size] CR [ids]
iwant = "SY " msg_count CR [ids]
isend = "SS " file_size CR bytes

For ihave:
Protocol and batch_size not used in initial implementation.
Default protocol is: lzh compressed export/import file.

For iwant:
SY means want only these.

Note that the SS command must terminate with CR, without LF.

RFC-822 header fields used are:

To:
From:
Subject:
Message-ID:
X-msgtype:
X-BID:

The basic interchange (example):
---

bn are BIDs (or MID if message has no BID).
m: is master, s: is slave.

m: SX 5
m: b1
m: b2
m: b3
m: b4
m: b5

s: SY 3
s: b1
s: b3
s: b5

m: SS 26545
m: <sends 26545 byte file>

In the case of any error, the station noticing the error must disconnect.

With more detail of one implementation (MB/SERVER processing)

Maximum batch size defined globally (default), and per link.
Ability to turn compression on/off (add/drop feature X in SID).

From sending side:

MB:

Scan messages to find a batch just larger than max batch size.
Keep record numbers and cc: id in list.
Send ihave.

Receive iwant.
Mark all messages in ihave and not in iwant as forwarded (dup bid).
Pass iwant list to SERVER in file.
Wait for server acknowledge.

SERVER:

Create export file.
Compress export file.
Signal MB that compressed file ready to send.

MB:

Send isend, send the file.
Receive prompt.
Mark all messages in iwant as forwarded.

From receiving side:

MB:

Receive ihave.
Check bids in ihave.
For all non-dup bids, make iwant list.
Send iwant.
Receive compressed file.
Signal SERVER import file available.
Send prompt.

SERVER:

Decompress file, import messages.

Section 8 - Import / Export files.

Import/Export files may contain any number of messages.
Each message is terminated by "/EX" EOL

RFC-822 header use in import/export files.

The standard RFC-822 keywords which must be supported are:

To:
From:
Subject:
Message-ID:
cc:

Extension keywords which must be supported are:

X-msgtype: (W0RLI)
X-BBS-Msg-Type: (JNOS)

X-BID: (W0RLI)

X-BBS-Hold: (JNOS)
X-Forwarded-To: (JNOS)

END OF SPEC

--

Hank Oredson @ Mentor Graphics
Internet : hank_oredson@mentorg.com
Amateur Radio: W0RLI@W0RLI.OR.USA.NA

761. Re: BBS specification

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-16 21:39:00 UTC
From: pme@gaia.electrum.kth.se
Message-ID: <PME.93Nov16223900@gaia.electrum.kth.se>
Source record: 51046

And where should we sent our coments ?
(So the people in ARRL headquarter read them...)

762. FBB PACKET BBS Release

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-16 22:12:06 UTC
From: chuckv@comtch.iea.com
Message-ID: <1993Nov16.221206.4972@comtch.iea.com>
Source record: 51048

I have heard that the new release of FBB is due out sometime in December.
Does anyone know of a good FTP site where this latest release might reside.

chuckv@comtch.iea.com
or
Packet WB7NNF@WB7NNF.#SPOK.WA.USA.NA

763. Re: wb7tpy gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-16 23:47:19 UTC
From: david@stat.com
Message-ID: <k0s5cc6w165w@stat.com>
Source record: 51049

cowart@convex.com (Michael Cowart) writes:

> however, today I tried to send one to another ham, and the local mailer deamo
> can't find "gate@wb7tpy.az.usa.na"
>
> Is this the right address? I can't find the original post.

That is the packet side of the address, the internet address is:

gate@wb7tpy.ampr.org

For full instructions on using the gateway, send mail to:

how-to-gate@stat.com

david

Internet: david@stat.com FAX: +1 (602) 451-6135
Bitnet: ATW1H@ASUACAD FidoNet=> 1:114/15
Amateur Packet ax25: wb7tpy@wb7tpy.az.usa.na

764. APT interface for PC

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-17 00:00:00 UTC
From: boyer@rd.eng.bbc.co.uk
Message-ID: <CGMyw3.HoL@bbc.co.uk>
Source record: 51055
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.digital.misc

I want to build an interface board for a pc to decode APT pictures (NOAA, GOES, Meteor meteor) on a pc . I could I suppose design my own but by then I could have built someone elses.
So Ia sk you has anyone the in fo on the interface described in QEX sep 88.
Qex appears to be unavailbe in the UK. Or has any a circuit or any useful info.

Please E-mail me as the news reader i have a really user unfriendly.

Thanks a lot

John.

765. Re: Where do you get modem chips TCM3105 and Am7910?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-17 00:16:43 UTC
From: tcline@hplvec.LVLD.HP.COM
Message-ID: <116230002@hplvec.LVLD.HP.COM>
Source record: 51064

> In rec.radio.amateur.digital.misc, rw3aj@glas.apc.ORG (Sergey A. Filimoshkin) writes:
>
> Where do you get the packet modem chips TCM3105 and Am7910?
> How price in the USA or EU? Answer E-mail please!
>
>
> Many TNX and 73 RW3AJ Serge Filimoshkin
> E-mail rw3aj@glas.apc.org
> FIDO 2:5020/63.7

I will also answer by email, but I thought it was a good question and
I'd like to see other responses too.

So, from my notes:

> Date: Tue, 10 Nov 92:
> I've heard through the grapevine that EasyTech carries the TCM3105 (look for
> their ad in Popular Electronics, Radio Electronics, etc). I've not
> confirmed this fact, though.

> Date: Fri, 22 Jan 93:
> The TCM3105 chips are available for $15 or so
> from Arrow Electronics (St Louis) among other places ...

> May, 1993:
> TCM3105 JDR Microdevices, (800) 538-5000
> $9.95/each, no minimum order
>
> Active Electronics, (800) 677-8899,
> international orders (514) 630-7410
> $6.47/each, $25.00 minimum order
>
> 4.4336 MHz crystal Active Electronics, (800) 677-8899,
> international orders (514) 630-7410
> $0.88/each, $25.00 minimum order
>
> (possibly other suppliers, the frequency is
> the European colorburst)

Hope this helps!

73

Ted Cline, N0RQV
ted_cline@hpisla.lvld.hp.com
Day: (303) 679-2352

766. Re: wb7tpy gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-17 02:18:34 UTC
From: dan@aznet.stat.com
Message-ID: <N0Z5cc1w165w@aznet.stat.com>
Source record: 51054

kenji@k2r.or.jp (Kenji Rikitake) writes:

> In article <cowart.753383276@neptune> cowart@convex.com (Michael Cowart) writ
> |however, today I tried to send one to another ham, and the local mailer dea
> |can't find "gate@wb7tpy.az.usa.na"
>
> NEVER USE HAM RADIO PACKET DOMAIN ADDRESS ON THE INTERNET, PLEASE.
> Note especially for North American stations: .NA is assigned to
> Namibia, which does not have enough bandwidth to accept error mail
> messages.
>
> I strongly urge RLI/MBL/whatever BBS systems to use a pseudo domain
> for themselves, and to QUIT using something quite confusing
> IMMEDIATELY.

Kenji!
Your jumping the gun before you know the info! that address is for the
packet side of things. The correct address is " gate@wb7tpy.ampr.org "
If you don't know the facts, why say anything!

>
> // Kenji
> --
> Kenji Rikitake <kenji@k2r.or.jp> <kenji@rcac.astem.or.jp> (More available!
> Persuade me you may, but I won't be persuaded. -- Aristophane

Dan N7MRP -- WB7TPY's Ax.25 Supplier

---
dan@aznet.stat.com
Daniel J. Meredith

767. Re: > Re: broadcasting

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-17 03:13:20 UTC
From: CMSMANDELIN@minna.acc.iit.edu
Message-ID: <1993Nov17.031320.10891@iitmax.iit.edu>
Source record: 51050

> I don't believe you need a commercial license to broadcast on FM if you follow
> the FCC rules. The FCC rules say you can transmit on FM but your output has
> to be less than x mVolts a x meters.
>
> JDR electronics carries an FM stereo transmitter kit that is legal if you
> don't modify it by adding things such as a power amplifier and a large antenna.
>
> If anyone is interested, I can lookup an summarize the requirements.
>
> Jay

It just so happens that I have a use for a low-power FM stereo transmitter!
(Demonstration/education purposes)

I would highly appreciate any data you could provide.

DE N9THH

Arthur M. Mandelin, II ("The Artation") CMSMANDELIN@harpo.acc.iit.edu
"...grey would be the color, if i had a heart."
-- nine inch nails, "something i can never have" (pretty hate machine)

768. Re: Windows NT Packet TCP/IP

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-17 07:13:29 UTC
From: allenm@sfu.ca
Message-ID: <allenm.753520409@wizard.ucs.sfu.ca>
Source record: 51052

Dave@pluto.ve3ifb.ampr.org (Dave Perry ve3ifb) writes:

>In article <CGLLFt.19q@wang.com> garyf@wang.com (Gary Field) writes:
>>From: garyf@wang.com (Gary Field)
>>Subject: Re: Windows NT Packet TCP/IP
>>Date: Tue, 16 Nov 1993 18:45:28 GMT

>>root@ka9qpg.ampr.org (The Owner) writes:
>>>Is anyone working on a Windows NT version of AX.25??
>>>Tnx Tom talley

>>Although I haven't tried it myself, I would expect NOS to run in a DOS
>>window under NT.

>I tried it under a friends beta NT. It didn't work. Sorry I don't
>have more details, no time, little interest in chasing the reason...

I'm guessing, but I don't think NT likes anything that wants to diddle
the hardware directly (ie. the serial port). NT wants everything to
use the Hardware Abstraction Layer (HAL) to do nasty things like that.

73 de Al VE7DPM
allenm@wizard.ucs.sfu.ca

769. MFJ 1278 software version info.

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-17 14:54:41 UTC
From: dgibbs@aber.ac.uk
Message-ID: <1993Nov17.145441.5822@aber.ac.uk>
Source record: 51056

Hi all,

Could somebody tell me what the latest software version is for the
MFJ 1278 TNC. I have V2.3 at the moment, and it has some strange features
like not allowing you to have a separate SSID for your PMS. You have to
explicitly type MAIL ON whenever you have finished using the system for
connections, and you cannot connect while the PMS is ON. I'm sure there
must be a later version that is better than this.

Many Thanks,

Dave.

Dave Gibbs, West Wales Software, Unit 2, (Tel. +44 (0) 970 626001)
The Science Park, Aberystwyth, Dyfed, SY23 3AH, UK. (Fax. +44 (0) 970 626665)

Internet :- dgibbs@aber.ac.uk / Packet Radio :- gw7ovv@gb7swn (.#45.gbr.eu)

770. Motorola S-Record an IEEE Standard???

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-17 17:23:26 UTC
From: linnig@m2000.dseg.ti.com
Message-ID: <LINNIG.93Nov17112326@m2000.dseg.ti.com>
Source record: 51059
Cross-posted to: sci.electronics,rec.radio.amateur.digital.misc

We want to use Motorola S-Record format for an avionics computer we are building for the Government. In order to use S-Records I must be able to point to a standard somewhere that documents that format. Ideally, if S-Records were an IEEE standard, that would be great. Failing that, being able to specify an "Industry Standard" publication (much like VME is documented) would be fine.

Can anyone help me, or point me to someone that knows where the definitive standard document for S-Records can be found?

All pointers and hints appreciated!

Someone on the internet pointed me to the Motorola BBS as a place where I might find the specification for the S-Records but I couldn't seem to find it anywhere.

Thanks!

-- Mike, N5QAW

- - - - - - - - - - - - - - - - - - + - - - - - - - - - - - - - - - - - +
Mike Linnig, Texas Instruments Inc. | 97.43% of all statistics are made |
Phone: (214) 575-3597 | up; most of them (83.6 percent) |
Internet: mike.linnig@dseg.ti.com | are wrong. |
- -

771. Re: BBS specification

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-17 18:11:50 UTC
From: hanko@wv.mentorg.com
Message-ID: <2cdph6$eka@wvhpadm1.mentorg.com>
Source record: 51058

In article <PME.93Nov16223900@gaia.electrum.kth.se>, pme@gaia.electrum.kth.se (Peter Enderborg) writes:
|> And where should we sent our coments ?
|> (So the people in ARRL headquarter read them...)

I don't think anyone at ARRL HQ is paying any attention to this.
You can send comments to any of the authors (we will see that they
are distributed to all authors). The best place to send them is
to bob@arasmith.com, since Bob is acting as editor, or to me, since
I've been working on the "next revision" for Bob.

Another thing you might do (and perhaps the best possible way
to submit comments) is to send them to the author of the code
you run. He can add comments that apply to the specifics of
his code, and submit to the authors conference. Many of my users
do exactly this - at the rate of 10 or 20 messages per week -
and it has worked out well.

... Hank

--

Hank Oredson @ Mentor Graphics
Internet : hank_oredson@mentorg.com
Amateur Radio: W0RLI@W0RLI.OR.USA.NA

772. Re: Question about GLB FirmWare

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-17 21:38:06 UTC
From: jimm@gvgadg.gvg.tek.com
Message-ID: <7691@gold.gvg.tek.com>
Source record: 51060

>
> I'm the proud keeper of a GLB TNC on a lifetime loan; this TNC is a Z80 based
> all software device (no encoder-decoder, ACIA chip, anything).
>

> Thanks in advance.
>

> Ing.Pedro E. Colla - Mail:colla@burzaco.satlink.net - Buenos Aires -
Argentina

I have GLB TNC as well, it was purchase in Jan 1986. It is a clone
of the TAPR TNC 2 and runs TAPR TNC2 ROM's just fine. By the way,
the new version software requires you to also change out the RAM
and upgrade to more RAM. All in all an easy modification. TAPR
will sell you a kit and update instructions for their TNC2 which
follows to the GLB TNC. .HEX files are available through FTP from
a number of sites, if you can program your own PROMS.

Jim Michener K9JM

773. Need info on exotic digital modes.

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-17 22:41:00 UTC
From: "kevin.jessup" <kevin.jessup@mixcom.mixcom.com>
Message-ID: <1993Nov17.224100.7256@mixcom.mixcom.com>
Source record: 51061

I'm currently searching for any amateur radio magazines/newspapers devoted strictly to 1990s-level digital RF technology. "Analog" or digital frequency-hopping spread-spectrum is also an interest. There just isn't much in QST, CQ, Amateur Radio, or anything else. Is there such an amateur radio publication? I am already aware of the ARRL spread spectrum book.

I'm also interested in any commercial RF industry weekly/monthly periodicals devoted to hi-tech (non-CW, non-SSB ;-) communications involving digital data, digitally encoded voice, SS, microwave, etc.

Also of interest are any current textbooks covering SS, high-frequency RF and digital modes in general.

Besides upgrading my technical knowledge of amateur radio, I'm also considering a carreer change to RF! I'm an EE so books that go into great detail are not a problem. That is, in fact, exactly what I am looking for. Thanks for the help!

--
/`-_ kevin.jessup@mixcom.com | The US Constitution defines the
{ }/ Marquette Electronics, Inc | "rights" the people give to the
\ / Milwaukee, Wisconsin, USA | government, not the reverse!
|__*| N9SQB, ARRL, Amateur Radio |

774. Re: wb7tpy gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-18 01:35:39 UTC
From: ben@nj8j.atl.ga.us
Message-ID: <5TH7cc1w165w@nj8j.atl.ga.us>
Source record: 51065

kenji@k2r.or.jp (Kenji Rikitake) writes:

> In article <cowart.753383276@neptune> cowart@convex.com (Michael Cowart) writ
> |however, today I tried to send one to another ham, and the local mailer dea
> |can't find "gate@wb7tpy.az.usa.na"
>
> NEVER USE HAM RADIO PACKET DOMAIN ADDRESS ON THE INTERNET, PLEASE.
> Note especially for North American stations: .NA is assigned to
> Namibia, which does not have enough bandwidth to accept error mail
> messages.
>
> I strongly urge RLI/MBL/whatever BBS systems to use a pseudo domain
> for themselves, and to QUIT using something quite confusing
> IMMEDIATELY.

Note that there is an alternate 4-character set of 'continent'
designators - this might be a good argument for preferring the
4-character set.

Ben

```
+-------------------------------------+---------------------------------+
| Ben Coleman NJ8J | "All that is not eternal is |
| AX.25: NJ8J@W4QO.#EAL.#ATL.GA.USA.NA | eternally out of date." |
| Internet: ben@nj8j.atl.ga.us | C. S. Lewis |
+-------------------------------------------------------------------------+
```

775. PK232 & Unix

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-18 01:42:24 UTC
From: cerdini@zen.gatelink.fr.net
Message-ID: <2ceju0$4t6@zen.gatelink.fr.net>
Source record: 51062

I'm looking for a software under Unix System (so in C source), which
can do an automatic connection on a node/bbs in AX25 mode. A software
where I can write script (like script shell) to send and receive messages
from a bbs like FBB, without manual operation...

I can write something like that in C, but if it exist, I will be happy
to have it !

73' to all,
--
Michel CERDINI BP5574 69247 Lyon Cedex 05 | E-Mail cerdini@zen.gatelink.fr.net
BBS/RTC Videotex ZENITH (8 acces) 24h/24 | AX25 F1ITS@FF2LY.FRHA.FRA.EU
Minitel: 7836.1996 - V32b/V42b: 7836.1001 |AmprNet F1ITS.AMPR.ORG [44.151.69.10]

776. Re: CoCo2 for packet

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-18 06:24:09 UTC
From: ncc2001@cwis.unomaha.edu
Message-ID: <1993Nov18.062409.2119@news.unomaha.edu>
Source record: 51063

For some reason, the text of my message was deleted. I just got a CoCo2 for $1 at a thrift shop. It is working order and I want to use it with my KPC-3 for when I go on trips to visit relatives. Does anybody out there how I can connect the KPC-3 to the serial connector on the CoCo3, and how could I connect a tape player to it for storing a term program? Any help you can offer will be appreciated.

73 de N0YBC, Michael

--
Michael Fortner N0YBC	Where are we going?
Internet: ncc2001@cwis.unomaha.edu	PLANET 10!
Packet: N0YBC@WB0BLR.#SWIA.IA.USA.NA	When?
	REAL SOON!

777. Re: Question about GLB FirmWare

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-18 15:03:01 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1993Nov18.150301.4287@ke4zv.atl.ga.us>
Source record: 51067

In article <7691@gold.gvg.tek.com> jimm@gvgadg.gvg.tek.com writes:
>>
>> I'm the proud keeper of a GLB TNC on a lifetime loan; this TNC is a Z80 based
>> all software device (no encoder-decoder, ACIA chip, anything).
>
>> Thanks in advance.
>>
>--
>> Ing.Pedro E. Colla - Mail:colla@burzaco.satlink.net - Buenos Aires -
>Argentina
>
>I have GLB TNC as well, it was purchase in Jan 1986. It is a clone
>of the TAPR TNC 2 and runs TAPR TNC2 ROM's just fine. By the way,
>the new version software requires you to also change out the RAM
>and upgrade to more RAM. All in all an easy modification. TAPR
>will sell you a kit and update instructions for their TNC2 which
>follows to the GLB TNC. .HEX files are available through FTP from
>a number of sites, if you can program your own PROMS.
>
>Jim Michener K9JM

Wrong GLB Jim. The one you have is a TAPR TNC2 copy that GLB came
out with as a last gasp. Their original TNC pre-dates the TNC2 and
is indeed an all software bit banger. It supports the Vancouver
protocol and the orignial AX25 protocol. To answer the original
question, as far as I know there is no updated firmware available
for the original GLB.

Gary
--
Gary Coffman KE4ZV | Where my job's going, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | I don't know. It might | uunet!rsiatl!ke4zv!gary
534 Shannon Way | wind up in Mexico. | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -NAFTA Blues |

778. Re: Subscribe

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-18 15:20:18 UTC
From: psmith@mozart.convex.COM
Message-ID: <9311181520.AA17091@mozart.convex.com>
Source record: 51066

```
subscribe
```

779. Re: wb7tpy gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-18 19:33:33 UTC
From: mark@ve6mgs.ampr.org
Message-ID: <1993Nov18.193333.25662@ve6mgs.ampr.org>
Source record: 51070

burke_br@adcae1.comm.mot.com (Bruce Burke Sp App) writes:

>The address:
>
>gate@wb7tpy.az.usa.na is only for the packet side.

And why? it *should* be
gate@wb7tpy.az.usa.noam
so as to not completely break the ISO standards ...
NA is for namibia, A is for Attrocious, B is for Broken!

Anyone operating a Gateway between Packet Radio and the Internet should be shot if they don't at least understand their use of the *.na suffix is a dangerous activity! The ignorance of the masses is NO excuse for a Gateway operator!

Ciao -- 73 de VE6MGS/Mark MX: mark@ve6mgs.ampr.ab.ca
PACKET: ve6mgs@VE6MGS.#edm.ab.can.noam

780. Hi Speed Packet Help

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-19 01:14:41 UTC
From: kshaw@s850.mwc.EDU
Message-ID: <199311190112.RAA23086@ucsd.edu>
Source record: 51068

Hello,

I am working on a presentation that concerns implementing ATM on Packet Radio. I need information on the current work being done in high speed data transmission over RF Links. (56kbps and higher) If you have information on this topic, or know where I can find it, please send e-mail to kshaw@s850.mwc.edu.

Thanks,

Kelly Shaw
AC4MB

781. KPC3 and TR-2600, is the capacitor necessary?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-19 04:02:52 UTC
From: ve1dln@nbnet.nb.ca
Message-ID: <ve1dln.13.0@nbnet.nb.ca>
Source record: 51069

When connecting a KPC-3 to a Kenwodd TR-2600, is the capacitor going from pin 1 to the mic ring really necessary? What is its purpose? I not having much success getting this setup to work, but all was fine when run on my Mocom70. Any suggestion?

782. Anyone using MacMultiCom 1.0 (MFj1278)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-19 07:53:00 UTC
From: WIESMANN@IAP.unibe.ch
Message-ID: <1993Nov19.075300.4509@aragorn.unibe.ch>
Source record: 51071

Hi,
Can anybody tell me something about the new software available for the
Macintosh and the MFJ1278. Any information (experiences, bugs, price) is
appriciated.

vy 73 de HB9GAV Andreas

--
Andreas Wiesmann Packet: hb9gav@hb9pd.che.eu
Institute of Applied Physics E-Mail: wiesmann@iap.unibe.ch
University of Bern
Sidlerstrasse 5 Phone: +41 31 631 45 90
CH-3012 Bern Fax: +41 31 631 35 65

783. Re: wb7tpy gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-19 12:55:24 UTC
From: burke_br@adcae1.comm.mot.com
Message-ID: <1993Nov19.125524.28187@lmpsbbs.comm.mot.com>
Source record: 51072

In article 25662@ve6mgs.ampr.org, mark@ve6mgs.ampr.org (Mark G. Salyzyn) writes:
}burke_br@adcae1.comm.mot.com (Bruce Burke Sp App) writes:
}
}>The address:
}>
}>gate@wb7tpy.az.usa.na is only for the packet side.
}
}And why? it *should* be
} gate@wb7tpy.az.usa.noam
}so as to not completely break the ISO standards ...
}NA is for namibia, A is for Attrocious, B is for Broken!
}
}Anyone operating a Gateway between Packet Radio and the Internet should be
}shot if they don't at least understand their use of the *.na suffix is a
}dangerous activity! The ignorance of the masses is NO excuse for a Gateway
}operator!
}
}Ciao -- 73 de VE6MGS/Mark MX: mark@ve6mgs.ampr.ab.ca
} PACKET: ve6mgs@VE6MGS.#edm.ab.can.noam

First, .na on packet, worldwide, stands for "North America." the
gateway operator has NO control over this. Second, once the gateway receives
the packet message, the header is stripped. The software looks in the
actual message for the IP address on the First Line and vice versa.

If you were familiar with the operation of both packet and the gateway, you would
have known this before shooting off your keyboard.

Bruce

784. American Airlines

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-19 13:55:10 UTC
From: n4hy@growler.ccr-p.ida.org
Message-ID: <N4HY.93Nov19135510@growler.ccr-p.ida.org>
Source record: 51073

CAVEAT EMPTOR. How can anyone not know about American Airlines strike?

Bob
--
Robert W. McGwier | n4hy@ccr-p.ida.org Interests: ham radio,
Center for Communications Research | scouts, astronomy,and golf
Princeton, N.J. 08520 | ASM Troop 5700, ACM Pack 53 Hightstown
(609)-279-6240(v) (609)-924-3061(f)| I used to be a Buffalo . . . NE III-120

785. Re: wb7tpy gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-19 19:45:56 UTC
From: hanko@wv.mentorg.com
Message-ID: <2cj7pk$r77@wvhpadm1.mentorg.com>
Source record: 51074

In article <1993Nov18.193333.25662@ve6mgs.ampr.org>, mark@ve6mgs.ampr.org (Mark G. Salyzyn) writes:
|> burke_br@adcae1.comm.mot.com (Bruce Burke Sp App) writes:
|>
|> >The address:
|> >
|> >gate@wb7tpy.az.usa.na is only for the packet side.
|>
|> And why? it *should* be
|> gate@wb7tpy.az.usa.noam
|> so as to not completely break the ISO standards ...
|> NA is for namibia, A is for Attrocious, B is for Broken!
|>
|> Anyone operating a Gateway between Packet Radio and the Internet should be
|> shot if they don't at least understand their use of the *.na suffix is a
|> dangerous activity! The ignorance of the masses is NO excuse for a Gateway
|> operator!
|>
|> Ciao -- 73 de VE6MGS/Mark MX: mark@ve6mgs.ampr.ab.ca
|> PACKET: ve6mgs@VE6MGS.#edm.ab.can.noam

Well ... DUH ...

These two network do NOT share the same namespace.
It is up to the agent that gates messages between them to take
care of all addressing issues when it moves messages from one
network to the other.

The fact that the interenet happens to think .na means "Namibia"
is just historical fact, as is the fact that the BBS network happens
to think it is "North America".

This is how things ARE, no matter how they SHOULD BE.

If you wish to refer to the ISO standards, please quote them.
There are MANY of them. More than one describe regional location
abbreviations. Many abbreviations are not unique, but must be
understood from context.

Bottom line: if messages sourced in the BBS network are somehow
getting to Namibia, it happens because of broken gateway software.

Whether the BBS network should use one standard or another is a
different issue. I will certainly not take any "sides" here.
As long as we use SOME standard, it matters not one whit which
standard we use - so let's pick one, and use it.

... Hank

--

(The above is MY opinion. Only)
Hank Oredson @ Mentor Graphics
Internet : hank_oredson@mentorg.com
Amateur Radio: W0RLI@W0RLI.OR.USA.NA

786. Re: Hi Speed Packet Help

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-19 19:55:41 UTC
From: CSLE87@maccvm.corp.mot.com
Message-ID: <1993Nov19.200251.4386@schbbs.mot.com>
Source record: 51075

So why run Adobe Type Manager over RF anyhow? You still have to feed the
printer paper manually.If you meant some other kind of ATM, give us a
clue as to what you're interested in. If it's automated teller machines
don't expect much response since those who know are sworn to secrecy by
their employers. By the way, if you find enough spectrum to support a
bunch of 56KBps or higher links, let the FCC know. There are an awful lo
of people who would like that bandwidth if it really existed in the rule
------------------------- Original Article -------------------------
Path: schbbs!mothost!ftpbox!news.acns.nwu.edu!math.ohio-state.edu!howland.reston
From: kshaw@s850.mwc.EDU (A. Kelly Shaw)
Newsgroups: rec.radio.amateur.digital.misc
Subject: Hi Speed Packet Help
Date: 19 Nov 93 01:14:41 GMT
Organization: ucsd usenet gateway
Lines: 13
Message-ID: <199311190112.RAA23086@ucsd.edu>
NNTP-Posting-Host: ucsd.edu
Originator: daemon@ucsd.edu

Hello,

I am working on a presentation that concerns implementing ATM on Packet
Radio. I need information on the current work being done in high speed
data transmission over RF Links. (56kbps and higher) If you have
information on this topic, or know where I can find it, please send
e-mail to kshaw@s850.mwc.edu.

Thanks,

Kelly Shaw
AC4MB

787. Re: wb7tpy gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-20 00:22:09 UTC
From: brian@nothing.ucsd.edu
Message-ID: <2cjnvhINNlfa@network.ucsd.edu>
Source record: 51076

Is there really anyone in the world who doesn't know that the USA is
on the continent of North America? Then why is the .NA required?
Stupid software?
- Brian

788. Re: Hi Speed Packet Help

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-20 01:36:39 UTC
From: dts@world.std.com
Message-ID: <CGroH4.F0B@world.std.com>
Source record: 51077

In article <1993Nov19.200251.4386@schbbs.mot.com> CSLE87@maccvm.corp.mot.com (Karl Beckman) writes:
>So why run Adobe Type Manager over RF anyhow? You still have to feed the
>printer paper manually.If you meant some other kind of ATM, give us a
>clue as to what you're interested in. If it's automated teller machines
>don't expect much response since those who know are sworn to secrecy by
>their employers. By the way, if you find enough spectrum to support a
>bunch of 56KBps or higher links, let the FCC know. There are an awful lo
>of people who would like that bandwidth if it really existed in the rule

I guess you're not in touch with the goings on in the data communications field. The world of internetworking is all abuzz with ATM. It stands for Asynchronous Transfer Mode, and it is a technology which allows lots of neat applications, including things like full motion video and extremely high speed data to flow across networks. ATM will likely play a big role in the information highway that the prez has been talking about.

ATM actually is theoretically implementable across very slow speed (eg. 2400 bps) lines as well as across various ultrafast fiber optics.

>------------------------- Original Article -------------------------
>Path: schbbs!mothost!ftpbox!news.acns.nwu.edu!math.ohio-state.edu!howland.reston
>From: kshaw@s850.mwc.EDU (A. Kelly Shaw)
>Newsgroups: rec.radio.amateur.digital.misc
>Subject: Hi Speed Packet Help
>Date: 19 Nov 93 01:14:41 GMT
>Organization: ucsd usenet gateway
>Lines: 13
>Message-ID: <199311190112.RAA23086@ucsd.edu>
>NNTP-Posting-Host: ucsd.edu
>Originator: daemon@ucsd.edu
>
>Hello,
>
>I am working on a presentation that concerns implementing ATM on Packet
>Radio. I need information on the current work being done in high speed
>data transmission over RF Links. (56kbps and higher) If you have
>information on this topic, or know where I can find it, please send
>e-mail to kshaw@s850.mwc.edu.
>
>Thanks,
>
>Kelly Shaw
>AC4MB
>

>

--

Daniel Senie Internet: dts@world.std.com
Daniel Senie Consulting n1jeb@world.std.com
508-365-5352 Compuserve: 74176,1347

789. Re: wb7tpy gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-20 01:51:08 UTC
From: dan@aznet.stat.com
Message-ID: <XZiaDc2w165w@aznet.stat.com>
Source record: 51079

mark@ve6mgs.ampr.org (Mark G. Salyzyn) writes:

> burke_br@adcae1.comm.mot.com (Bruce Burke Sp App) writes:
>
> >The address:
> >
> >gate@wb7tpy.az.usa.na is only for the packet side.
>
> And why? it *should* be
> gate@wb7tpy.az.usa.noam
> so as to not completely break the ISO standards ...
> NA is for namibia, A is for Attrocious, B is for Broken!
>
> Anyone operating a Gateway between Packet Radio and the Internet should be
> shot if they don't at least understand their use of the *.na suffix is a
> dangerous activity! The ignorance of the masses is NO excuse for a Gateway
> operator!
>
> Ciao -- 73 de VE6MGS/Mark MX: mark@ve6mgs.ampr.ab.ca
> PACKET: ve6mgs@VE6MGS.#edm.ab.can.noam

The packet side, WERE NOT TALKING INTERNET HERE!

You're sure going to have a hard time shooting everyone on the West Coast..
None of us use NOAM and probably never will...

NA is what it has been and is still expected to be for some time...

Dan

---
dan@aznet.stat.com
Daniel J. Meredith

790. How to detect 2400bps 4DPSK?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-20 02:36:28 UTC
From: wk@sam.frc.maf.govt.nz
Message-ID: <1993Nov20.023628.9192@frc.maf.govt.nz>
Source record: 51078

I was wondering if some Knowledgeable Person on the Net could point me in the right direction. The HT I use with 2400 bps (terrestrial PSK) packet has a very slow squelch, and I have attempted to build a carrier detection circuit so as to run the radio unsquelched. This should cure the problem of loosing the first part of a packet.

The circuit I tried is a 567 PLL, centred on 1800 Hz. It works fine...as long as the signals contains no phase jumps. The loop flies out of lock as soon as phase transitions occur, creating spikes on the PLL output.

I have played with the loop band with and gain, all to no avail. Also, I tried feeding the PLL output through a low pass filter into a Schmitt trigger, which worked, but the DCD circuit became slower then my squelch...

Rather than trying to re-invent the wheel, I was wondering how this is done in commercial PSK packet modems. Any pointers appreciated.

Regards, Wilbert ZL2BSJ

--
Wilbert Knol MAFFISH Marine Research, Wellington, New Zealand.
Usenet: wk@frc.maf.govt.nz PACKET:ZL2BSJ@ZL2WA.NZL.OC AMPR:[44.147.180.88]
AX25, NET/ROM, TCP/IP mailbox 146.625 MHz Wellington Data, 144.650 Simplex

791. Re: How to detect 2400bps 4DPSK?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-20 09:52:50 UTC
From: dave@llondel.demon.co.uk
Message-ID: <753814370snx@llondel.demon.co.uk>
Source record: 51083

In article <1993Nov20.023628.9192@frc.maf.govt.nz> wk@frc.maf.govt.nz (Wilbert Knol) writes:
>I was wondering if some Knowledgeable Person on the Net could point me
>in the right direction. The HT I use with 2400 bps (terrestrial PSK)
>packet has a very slow squelch, and I have attempted to build a
>carrier detection circuit so as to run the radio unsquelched. This
>should cure the problem of loosing the first part of a packet.
>
>The circuit I tried is a 567 PLL, centred on 1800 Hz. It works
>fine...as long as the signals contains no phase jumps. The loop flies
>out of lock as soon as phase transitions occur, creating spikes on the
>PLL output.
>
>I have played with the loop band with and gain, all to no avail. Also,
>I tried feeding the PLL output through a low pass filter into a
>Schmitt trigger, which worked, but the DCD circuit became slower then
>my squelch...
>
>Rather than trying to re-invent the wheel, I was wondering how this is
>done in commercial PSK packet modems. Any pointers appreciated.
>
Based on similar problems at RF, you could try putting a x2 or x4 frequency multiplier in the audio circuit and running your PLL at the higher frequency.

The other thing to try if you are using a TAPR state machine eprom in your TNC is to build the state-machine DCD-mod and see if that works. You might need to adjust a few time constants from the 1200baud version but it ought to work.

Note that I haven't tried either of the above, but they do seem like good ideas :-)

Dave
--

****
* G4WRW @ GB7WRW.#41.GBR.EU AX25 * Start at the beginning. Go on *
* dave@llondel.demon.co.uk Internet * until the end. Then stop. *
* g4wrw@g4wrw.ampr.org Amprnet * (the king to the white rabbit) *
****

792. WANTED: RTTY software for "dumb" modems

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-20 15:35:59 UTC
From: fmitch@netcom.com
Message-ID: <fmitchCGsrBz.42M@netcom.com>
Source record: 51080

hello, mitch wa4osr here in mobile, alabama...

a friend and i have built the a@a engineering baycom modem kits and we
are experimenting with them on vhf rtty... we are looking for software
that will receive rtty and or the other digital modes using just a
dumb modem... i know there are such programs out there!!! where are
they?... please email me ftp sites and/or landline bbs locations...

thanks,
mitch, wa4osr

--
---
fmitch@netcom.com
Felton "Mitch" Mitchell, WA4OSR in Mobile, Alabama USA
205-342-7259 home, 205-476-4100 work, 205-476-0465 FAX
co-sysop for W4IAX bbs running fbb ... sysop for WA4OSR DXCluster in Mobile..
---

793. Detecting PSK... an easy way...

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-20 16:57:16 UTC
From: ka7oei@uugate.wa7slg.ampr.ORG
Message-ID: <34404@uugate.wa7slg.ampr.org>
Source record: 51082

The simplest way to detect PSK with the phase detector is to get rid
of the phase transistion. With BPSK, double the frequency: QPSK, quadruple
it, etc.

A dirt-cheap circuit to do that would be to build an amplifier for
your input audio (use an LM386) and get, say, an 8-1k audio transformer
with a centertapped 1k "secondary". On the secondary, just put a
full-wave rectifier (the 2 diode kind... The 4 diode kind will work,
too, if you want... You have suddenly doubled the frequency... and multiplied
the voltage, too, so you will probably have to attenuate it.

An advantage to this scheme is that it also rejects even-order multiplication
projects. It might be reasonable to have a 1st or 2nd order highpass filter
on this thing, but avoid too much filtering, since that will slow your
dcd...

All that is necessary (to have this work) is to have enough audio voltage to
drive the diodes well, hence the '386 amp.

You *could* build something with a costas loop, but...

<Clint>

794. Internet vs. PBBS namespaces (was Re: wb7tpy gateway)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-20 18:21:00 UTC
From: winter@apple.com
Message-ID: <2cln6c$bfl@apple.com>
Source record: 51081

In article <2cj7pk$r77@wvhpadm1.mentorg.com>,
Hank Oredson <Hank_Oredson@mentorg.com> wrote:
>In article <1993Nov18.193333.25662@ve6mgs.ampr.org>,
>mark@ve6mgs.ampr.org (Mark G. Salyzyn) writes:
>|> burke_br@adcae1.comm.mot.com (Bruce Burke Sp App) writes:
>|>
>|> >gate@wb7tpy.az.usa.na is only for the packet side.
>|>
>|> And why? it *should* be
>|> gate@wb7tpy.az.usa.noam
>|> so as to not completely break the ISO standards ...
>|> NA is for namibia
>|>
>|> Anyone operating a Gateway between Packet Radio and the Internet should be
>|> shot if they don't at least understand their use of the *.na suffix is a
>|> dangerous activity! The ignorance of the masses is NO excuse for a Gateway
>|> operator!
>
>These two network do NOT share the same namespace.
>It is up to the agent that gates messages between them to take
>care of all addressing issues when it moves messages from one
>network to the other.

This isn't an address translation problem. The problem is that many
messages aren't getting to gateways in the first place because of
(very understandable) confusion between real Internet addresses
and PBBS addresses that look like Internet addresses but aren't.
It's all very fine for those of us who can immediately spot the
difference to say that people shouldn't confuse the two, but that's
unrealistic. As Mark notes, sysops have a remedy available that will
solve the problem.

>Bottom line: if messages sourced in the BBS network are somehow
>getting to Namibia, it happens because of broken gateway software.

The message in question *wasn't* sourced in the PBBS network. It
was originated on the Internet, which appropriately tried to find
the designated (albeit nonexistent) site in Namibia.

>Whether the BBS network should use one standard or another is a
>different issue. I will certainly not take any "sides" here.
>As long as we use SOME standard, it matters not one whit which
>standard we use - so let's pick one, and use it.

Because of the increasing interaction between the Internet and
the PBBS system, it matters a lot more than a whit. When people

see two sets of addresses that look nearly identical in format,
they're going to mix them up occasionally. Why shouldn't PBBS
sysops make a simple change (in this case, from NA to NOAM) that
can prevent the problem?

I know that N0ARY for one has already done this. I consider that
yet another example of Bob's desire to help his users, which includes
heading off common mistakes instead of just saying, "You should have
known better than to do that."

Patty

--
============================== Patty Winter ==============================
Apple contractor Internet: winter@apple.com
Sunnyvale, California AMPRNet: 44.4.4.50
"What about truth? What about reality?"
"What about the way the old ending tested in Canoga Park?"
================================== N6BIS ==================================

795. Max BAUD on 6M AM & FM

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-20 22:09:21 UTC
From: andrews@fms.com
Message-ID: <CGt9JM.5v9@fms.com>
Source record: 51084

Hello all,

I thought this question could easily be answerd by Pt 97, WRONG!

I need to know, what is the maximum baud rate (AX.37 packet) using
either AM _or_ FM on 6 meters???

Figuring A) 6 meters is such a mostly dead hunk of band space & B)
the availability of 6 meter 25KHz commercial gear; I would probably
be able to do quite a high rate of speed (Zoom!!!) :) :) :)

BTW, I'm trying to set up a 100 mile point to point link...

--
Tell Me Something I Don't Know, ! HAM = N8OFS
Show Me Something I Can Use, ! ARMY MARS = AAN5HJT
Push The Buttons, ! CB = THE NEON KNIGHT
Connect The God-Damn Dots!!! - Ministry ! HACKER = TH3 N30N KN16Ht

796. WNOS (Latest Version?)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-20 23:45:19 UTC
From: njbirdman@delphi.com
Message-ID: <9311201824591.njbirdman.DLITE@delphi.com>
Source record: 51085

Anyone tell me where I can FTP the latest version of WNOS TCP/IP software. I am using V4A9 now, but the executable I have does not have NNTP or NETROM. I have V4A8, which has NNTP and NETROM, but not POP3, or Function key coding. I really like the WNOS interface. Thanks,
John, N4JS

NJBIRDMAN@Delphi.com

797. Re: wb7tpy gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-21 01:16:20 UTC
From: enge@enge.almaden.ibm.com
Message-ID: <2cmfh4$n3r@juniper.almaden.ibm.com>
Source record: 51087

In article <2cjnvhINNlfa@network.ucsd.edu>, Brian Kantor
<brian@nothing.ucsd.edu> wrote:
>Is there really anyone in the world who doesn't know that the USA is
>on the continent of North America? Then why is the .NA required?
>Stupid software?
> - Brian

The original purpose of the continents was to make life easier for the
"average-Joe" SYSOP. One might route anything-to-Europe to a certain
station which save having to know every country code.

Besides, it HI.USA.OC not .NA...

I would like to see the '2 letter" continent codes go away and only use
the 4 letter ones. Lets either abandon one or the other.

Roy Engehausen, AA4RE
enge@almaden.ibm.com

798. Re: Motorola S-Record an IEEE Standard???

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-21 01:41:51 UTC
From: paulg@col.hp.com
Message-ID: <2cmh10$l8p@hp-col.col.hp.com>
Source record: 51086
Cross-posted to: sci.electronics,rec.radio.amateur.digital.misc

Mike Linnig (linnig@m2000.dseg.ti.com) wrote:

: We want to use Motorola S-Record format for an avionics computer we are
: building for the Government. In order to use S-Records I must be able to
: point to a standard somewhere that documents that format. Ideally, if
: S-Records were an IEEE standard, that would be great. Failing that, being
: able to specify an "Industry Standard" publication (much like VME is
: documented) would be fine.

: -- Mike, N5QAW

There's a file on ernie.uvic.ca under dsptools called srec.zip. I haven't looked at it, but it the name looks like it might be what you want.

Contacting Motorola (even if through their local sales rep) or your language tool vendor would be the best way to find publications about the S-Record format.

The industry standard object file format for embedded systems these days is HP-MRI IEEE-695. To use the full power of many compilers, debuggers, performance analyzers, logic analyzers, and emulators, including those sold by HP, you'll need to generate IEEE-695, not S-Records.

---------======= * ================
Paul "waiting for my ticket" Goble
paulg@col.hp.com

799. TCP/IP, Packet, RTTY, etc on Sun Sparcstation...Suggestions?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-21 09:59:57 UTC
From: stickler@klaava.Helsinki.FI
Message-ID: <2cne6t$99s@klaava.Helsinki.FI>
Source record: 51088

I'm looking for software/hardware solutions to get onto the digital modes using a Sun Sparcstation. Assuming I'll be using a multimode controller, I'm trying to locate software for working TCP/IP (or NOS), RTTY, AMTOR, Packet, etc. Of course, "straight" packet can be done with a just a terminal emulator, but I'm hoping to find some more talented software.

Particulary, does there exist a version of KA9Q/NOS for SunOS?

Any help will be greatly appreciated. Thanks in advance,

//
Patrick M. Stickler OH2LUV, KC4YYY The comments contained herein
WSOY - Information Systems Division do not necessarily reflect the
Helsinki, FINLAND (psti@wsoy.fi) official views of my employer.
//

800. Re: wb7tpy gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-21 10:05:30 UTC
From: kenji@k2r.or.jp
Message-ID: <KENJI.93Nov21190530@reseau.k2r.or.jp>
Source record: 51089

In article <2cjnvhINNlfa@network.ucsd.edu> brian@nothing.ucsd.edu (Brian Kantor) writes:
|Is there really anyone in the world who doesn't know that the USA is
|on the continent of North America? Then why is the .NA required?
|Stupid software?

Stupid people and software, maybe.

Including routing information into mail address will not work and
should be abandoned immediately.

// Kenji

--
Kenji Rikitake <kenji@k2r.or.jp> <kenji@rcac.astem.or.jp> (More available!)
Persuade me you may, but I won't be persuaded. -- Aristophanes

801. Re: wb7tpy gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-21 10:12:57 UTC
From: kenji@k2r.or.jp
Message-ID: <KENJI.93Nov21191257@reseau.k2r.or.jp>
Source record: 51090

In article <N0Z5cc1w165w@aznet.stat.com> dan@aznet.stat.com (Daniel J. Meredith) writes:
|Kenji!
| Your jumping the gun before you know the info! that address is for the
|packet side of things. The correct address is " gate@wb7tpy.ampr.org "
|If you don't know the facts, why say anything!

Dan, I am not blaming your service - what I'm complaining at is the
existence of people who are confusing 'packet side' and 'Internet
side.' I'm saying that packet side of people should quit using such a
confusing addressing scheme.

What I'm saying is that ham radio people should:

* Stop using addressing schemes which are easily mixed up with each other

* Stop saying RLI/MBL addresses as "Internet" addresses -
all Internet-joining organization should accept the naming rule which IANA
(Internet Assigned Name Authority) defines

|Dan N7MRP -- WB7TPY's Ax.25 Supplier

// Kenji Rikitake, kenji@jj1bdx.ampr.org
--
Kenji Rikitake <kenji@k2r.or.jp> <kenji@rcac.astem.or.jp> (More available!)
Persuade me you may, but I won't be persuaded. -- Aristophanes

802. Re: wb7tpy gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-21 10:24:04 UTC
From: kenji@k2r.or.jp
Message-ID: <KENJI.93Nov21192404@reseau.k2r.or.jp>
Source record: 51091

In article <XZiaDc2w165w@aznet.stat.com> dan@aznet.stat.com (Daniel J. Meredith) writes:
|The packet side, WERE NOT TALKING INTERNET HERE!

While I accept above claim, I insist both addressing schemes are quite confusing. I think packet radio side must compromise, considering the number of people using the addressing scheme. (In fact, some people are happily using Internet domain naming system for packet radio.)

|You're sure going to have a hard time shooting everyone on the West Coast..
|None of us use NOAM and probably never will...

I'd rather suggest to use something LOGICAL - .rlinet or .mblnet? :)

|NA is what it has been and is still expected to be for some time...

Making NA to NA.MBLNET or something else will completely solve the problem.

// Kenji
--
Kenji Rikitake <kenji@k2r.or.jp> <kenji@rcac.astem.or.jp> (More available!)
Persuade me you may, but I won't be persuaded. -- Aristophanes

803. Re: Max BAUD on 6M AM & FM

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-21 13:57:28 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1993Nov21.135728.17393@ke4zv.atl.ga.us>
Source record: 51092

In article <CGt9JM.5v9@fms.com> andrews@fms.com (Andrew Sargent N8OFS) writes:
>
>I thought this question could easily be answerd by Pt 97, WRONG!
>
>I need to know, what is the maximum baud rate (AX.37 packet) using
>either AM _or_ FM on 6 meters???

Here's what Part 97 has to say about data transmission on 6 meters.

#quote

97.307f(5)
A RTTY, data or multiplexed emission using a specified digital code
listed in 97.309(a) of this Part may be transmitted. The symbol rate
must not exceed 19.6 kilobauds. A RTTY, data or multiplexed emission
using an unspecified emission using an unspecified digital code under
the limitations listed in 97.309(b) of this Part also may be transmitted.
The authorized bandwidth is 20 kHz.

#end quote

So you're limited to 19.6 kb *and* a maximum bandwidth of 20 kHz.
The latter is the real limit for simple modulation encodings such
as FSK, or AFSK over AM or FM radios. With current amateur techniques,
that's a limit of 2400 baud for AM or FM. The PSK scheme used in 9600
baud modems would fit the bandwidth using SSB radios, and MSK would permit
16.6 kilobaud. No presently used amateur technique can squeeze 19.6 kilobaud
into 20 kHz.

NOTE: For the more complex modulations, baud != bps. You can encode more
than one bit with a single baud, thus achieving higher effective bps
transfers. 38.4 kbps should be possible with amateur grade techniques.
Compression techniques should increase that even further.

Gary
--
Gary Coffman KE4ZV | Where my job's going, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | I don't know. It might | uunet!rsiatl!ke4zv!gary
534 Shannon Way | wind up in Mexico. | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -NAFTA Blues |

804. Re: How to detect 2400bps 4DPSK?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-21 14:04:04 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1993Nov21.140404.17498@ke4zv.atl.ga.us>
Source record: 51093

In article <1993Nov20.023628.9192@frc.maf.govt.nz> wk@frc.maf.govt.nz (Wilbert Knol) writes:
>I was wondering if some Knowledgeable Person on the Net could point me
>in the right direction. The HT I use with 2400 bps (terrestrial PSK)
>packet has a very slow squelch, and I have attempted to build a
>carrier detection circuit so as to run the radio unsquelched. This
>should cure the problem of loosing the first part of a packet.

>Rather than trying to re-invent the wheel, I was wondering how this is
>done in commercial PSK packet modems. Any pointers appreciated.

You've been taking the wrong approach. Simply install a TAPR state machine DCD circuit in your TNC and you can run open radio squelch without problems. This circuit sets DCD active only when it encounters state transitions corresponding to a valid frame, including the flags transmitted during the TxD period at the head of a frame. TAPR has state machine kits for all the popular TNCs.

Gary
--
Gary Coffman KE4ZV | Where my job's going, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | I don't know. It might | uunet!rsiatl!ke4zv!gary
534 Shannon Way | wind up in Mexico. | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -NAFTA Blues |

805. Portable Packet Station with a HP 95LX ???

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-21 18:18:43 UTC
From: lmcifpl@LMC.Ericsson.SE
Message-ID: <1993Nov21.181843.20678@exu.ericsson.se>
Source record: 51094

I reckon that this is the best place for the following query.

I have a 512 kb HP 95LX (palmtop) and will soon become the owner of a FT-530 HT. I'm curious about packet and am wondering if any one out there has managed to connect these elements with a TNC (and ??) to creat a portable packet station, for this is what I'd like to achieve.

What TNC would be recommended? What software is required? What else would I need? (And any other questions that a newbie should ask)

My first preference would be for a TNC that is small (cigarette box size) battery powered. Second preference would be something that could be carried EASILY and set up in seconds in office/apartemnt etc. The memory requirements of the software should be low (the 95LX is not powerhouse!).

Thanks, 73 DE Fergal

Standard Disclaimer

806. Re: Max BAUD on 6M AM & FM

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-21 19:14:56 UTC
From: andrews@fms.com
Message-ID: <CGuw4x.L0y@fms.com>
Source record: 51096

In article <1993Nov21.135728.17393@ke4zv.atl.ga.us> gary@ke4zv.UUCP (Gary Coffman) writes:
>In article <CGt9JM.5v9@fms.com> andrews@fms.com (Andrew Sargent N8OFS) writes:
>>
>>I thought this question could easily be answerd by Pt 97, WRONG!
>>
>>I need to know, what is the maximum baud rate (AX.37 packet) using
>>either AM _or_ FM on 6 meters???
>
>Here's what Part 97 has to say about data transmission on 6 meters.
>
>#quote
>
>97.307f(5)
>A RTTY, data or multiplexed emission using a specified digital code
>listed in 97.309(a) of this Part may be transmitted. The symbol rate
>must not exceed 19.6 kilobauds. A RTTY, data or multiplexed emission
>using an unspecified emission using an unspecified digital code under
>the limitations listed in 97.309(b) of this Part also may be transmitted.
>The authorized bandwidth is 20 kHz.
>
>#end quote
>
Yea, that's what my rulebook says. Still sounds like lawyer gibberish
to me...
>
>So you're limited to 19.6 kb *and* a maximum bandwidth of 20 kHz.
>The latter is the real limit for simple modulation encodings such
>as FSK, or AFSK over AM or FM radios. With current amateur techniques,
>that's a limit of 2400 baud for AM or FM. The PSK scheme used in 9600
>baud modems would fit the bandwidth using SSB radios, and MSK would permit
>16.6 kilobaud. No presently used amateur technique can squeeze 19.6 kilobaud
>into 20 kHz.
>
OK, so 2400 baud is the max using AX.37 packet with commercial FM gear.
>
>NOTE: For the more complex modulations, baud != bps. You can encode more
>than one bit with a single baud, thus achieving higher effective bps
>transfers. 38.4 kbps should be possible with amateur grade techniques.
>Compression techniques should increase that even further.
>
Ummm, wait a minute. I thought encoding and compression was illegal
because the FCC dosen't think it's standard.
>
>Gary

>
Thanks much Gary for the reply, I think I'm on the right track...

(If anyone else has any other ideas, let me know)

73 Gary de Andy

--
Tell Me Something I Don't Know, ! HAM = N8OFS
Show Me Something I Can Use, ! ARMY MARS = AAN5HJT
Push The Buttons, ! CB = THE NEON KNIGHT
Connect The God-Damn Dots!!! - Ministry ! HACKER = TH3 N30N KN16Ht

807. Re: Max BAUD on 6M AM & FM

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-21 19:50:47 UTC
From: arog@BIX.com
Message-ID: <arog.753911447@BIX.com>
Source record: 51095

gary@ke4zv.atl.ga.us (Gary Coffman) writes:

[stuff cut]

>#quote

>97.307f(5)
>A RTTY, data or multiplexed emission using a specified digital code
>listed in 97.309(a) of this Part may be transmitted. The symbol rate
>must not exceed 19.6 kilobauds. A RTTY, data or multiplexed emission
>using an unspecified emission using an unspecified digital code under
>the limitations listed in 97.309(b) of this Part also may be transmitted.
>The authorized bandwidth is 20 kHz.

>#end quote

[more stuff cut to end]

Taken another way, by the rule.of.thumb that the sum of
twice the deveation plus twice the highest modulating freq
is the occupied bandwidth, five kc dev in a twenty kc
channel allows the highest significant modulation to
be six kc for FM. For AM, its just twice the modulating
freq, of course.

Now, how high a bps rate can be fit in six kc ?

808. Re: wb7tpy gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-22 01:08:04 UTC
From: eeyimkn@unicorn.nott.ac.uk
Message-ID: <2cp3dk$lls@unicorn.ccc.nottingham.ac.uk>
Source record: 51097

In article <KENJI.93Nov21192404@reseau.k2r.or.jp> kenji@k2r.or.jp (Kenji Rikitake) writes:
> |NA is what it has been and is still expected to be for some time...
>
>Making NA to NA.MBLNET or something else will completely solve the problem.
Yes, but it'll add another layer to the amateur packet network, which
is completely pointless judging by the potential problems, which are
very small. Anyway, we'd need FBBNET, NNANET, ... :-)
The gateways don't put any part of the packet address onto the
Internet in any consequential part, so why worry? Just because NA
happens to correspond to a valid top level domain on the Internet
doesn't mean that the entire packet network should have to change.

My ukp0.02 (tuppence!) on the 2 vs. 4 letter codes - I may be sticking
my neck out here, but nobody in Europe uses the 4-letter versions.
Everybody is @.eu, in fact I don't even know what the 4-letter version
is as I've never seen it in a mail header from Europe! The Middle East
seem to use .mdle, but that's the only extensive use of the 4-letter
codes that I can think of.
And for American BBSs using .USA rather than .USA.NA, well... maybe
everybody else should drop continent designators on the ground that
'everybody knows that San Marino's in Europe, don't they?'.

73 Mike

--
+- Mike Knell, University of Nottingham, UK -=- eeyimkn@unicorn.nott.ac.uk --+
| --THIS SPACE TEMPORARILY BLANK-- | AMPR: g7gpa@hobbes.g7gpa.ampr.org |
| (until I can think of a decent joke)| AX25: g7gpa@g7gpa.gb7bad.#23.gbr.eu |
|UNDER the overpass! OVER the underpass! Around the future and BEYOND REPAIR!|

809. Re: Question about GLB FirmWare

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-22 01:26:19 UTC
From: dave@esi.COM.AU
Message-ID: <4856@eram.esi.COM.AU>
Source record: 51098

In article <1993Nov18.150301.4287@ke4zv.atl.ga.us>,
gary@ke4zv.UUCP (Gary Coffman) writes:

[GLB TNC]

| as far as I know there is no updated firmware available
| for the original GLB.

That's right; a number of people in Australia have those things, and they are no longer supported. Now, if can reverse-engineer the board architecture, and add an SIO chip, it will make a fine KISS modem on 1200 bps :-)

--
Dave Horsfall (VK2KFU) VK2KFU @ VK2RWI.NSW.AUS.OC PGP 2.3
dave@esi.COM.AU ...munnari!esi.COM.AU!dave available

810. Re: wb7tpy gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-22 06:24:33 UTC
From: ben@nj8j.atl.ga.us
Message-ID: <mV0DDc5w165w@nj8j.atl.ga.us>
Source record: 51103

burke_br@adcae1.comm.mot.com (WB4YUC) writes:

> First, .na on packet, worldwide, stands for "North America." the
> gateway operator has NO control over this.

Of course, there is an alternate system, which uses 4-character, rather than 2-charter, 'continent' addresses. It was devised by some sysops who found that the two-character system was inadequate and that a further breakdown of 'continents' would ease routings. In practice, both are used, and sysops pretty well have to set up for both when setting up routing tables(at least I did when I sysoped W8SP/PBBS).

I believe the issue the original poster was bringing up is that according to the _real_ Murphy's law(as opposed to the "Murphy's Law" that we hams know and love(?)), which reads, roughly, "If there is a way to do something wrong, someone, sometime, will do it that way", since packet addresses look so much like Internet addresses, someone, sometime(in fact, many sometimes), will send packet mail as Internet mail rather than via a gateway. If the packet address ends in .na, it may(depending on where the appropriate domain servers are) have to travel to Namibia before getting bounced back to the sender. If the packet address ends in .noam, it will get bounced as soon as it hits a mailer capable of domain lookups, since there is no top level domain noam. The latter will cost the net in general(and, apparently, Namibia in particular) less, since it shouldn't require trans-atlantic network connections. From where I sit, it looks like it would be a good idea for the packet network to drop the 2-character continent designators in favor of the 4-character designators. Either that or, as some have already suggested, come up with a unique top-level domain for the packet network that will be make sure that packet addresses are distinguished from Internet addresses.

Personally, with the legal problems with Inet->packet and packet->Inet gatewaying, I think the better compromise would be to go with the 4-character designators, as I'm not sure we want to make the packet network look like 'just another part' of the Internet. I'd rather keep emailers aware that because of legal requirements, they have to deliberately send email to the gateway.

Ben

+--------------------------------------+---------------------------------+
Ben Coleman NJ8J	"All that is not eternal is
AX.25: NJ8J@W4QO.#EAL.#ATL.GA.USA.NA	eternally out of date."
Internet: ben@nj8j.atl.ga.us	C. S. Lewis
+--------------------------------------+---------------------------------+

811. Re: wb7tpy gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-22 06:54:34 UTC
From: ben@nj8j.atl.ga.us
Message-ID: <N0aeDc6w165w@nj8j.atl.ga.us>
Source record: 51104

brian@nothing.ucsd.edu (Brian Kantor) writes:

> Is there really anyone in the world who doesn't know that the USA is
> on the continent of North America? Then why is the .NA required?
> Stupid software?

The software has nothing to do with it. I can't think of any packet BBS software that has .NA(or any other packet address designator, for that matter) hard-coded into it. The address designators are all used in routing tables built by packet BBS sysops. As far as the software is concerned, we could switch to another system of hierarchical routing designators, and the software wouldn't know any difference. Of course, getting all of the packet sysops to cooperate in the new system would be another story.

Continental designators in general exist because it makes it easier on sysops building and maintaining routing tables. E.g. for the typical VHF-only packet BBS in the U.S., all 'DX' packet mail is routed to one PBBS, either an HF-or-satellite-capable PBBS, or a PBBS that is 'closer' to said HF-or-satellite-capable PBBS. It's a lot easier to enter 'eu' or 'euro' in the routing file than to enter the 3-character designators of all of the countries in Europe. The same goes for packet mail intended for Africa - I'd use 'af' or 'afri' rather than entering the 3-character designators for all of the countries in Africa. Of course, a PBBS sysop in Europe _would_ have to use the 3-character designators for countries in Europe, because traffic for different might have to be routed to different PBBSs. And the U.S. sysop would probably use the 3-character designators for North American countries in his/her routing file. The general rule is that you use 3-character designators for the countries in your own continent, and continental designators for the countries outside of your continent(presuming, of course, that all of the traffic for a particular continent is routed to the same PBBS).

This has the advantage, also, that your routing file is immune to political turmoil in continents outside of your own. If you route only on 3-character country designators, your routing tables must be changed every time a political change causes in change in or addition to(or subtraction of) the 3-character designators. If you route on continent designators, you only need do that for the 3-character designators in your own continent.

With the 2-character continent designators, .na is not insignificant. It includes the countries in the Caribbean(as I found out one day when I noticed that a piece of Caribbean-bound packet mail had not forwarded because I had forgotten to put designators for the Caribbean in my routing file).

You might argue that under the 4-character continent designator system, NOAM is irrelevant, as it includes only the USA and Canada(CEAM covers Central America).

Are we then to tell the world, 'Well, you might use continental designators for the rest of the world, but don't bother doing it for .usa. You know where we are.' I submit that it would not at all 'enhance international goodwill'. Most likely, the response we'd get would be 'There they go again. Typical parochial American attitude'.

Ben

+-------------------------------------+---------------------------------+
Ben Coleman NJ8J	"All that is not eternal is
AX.25: NJ8J@W4QO.#EAL.#ATL.GA.USA.NA	eternally out of date."
Internet: ben@nj8j.atl.ga.us	C. S. Lewis
+-------------------------------------+---------------------------------+

812. Re: wb7tpy gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-22 08:02:11 UTC
From: ben@nj8j.atl.ga.us
Message-ID: <ceeeDc7w165w@nj8j.atl.ga.us>
Source record: 51105

kenji@k2r.or.jp (Kenji Rikitake) writes:

> In article <2cjnvhINNlfa@network.ucsd.edu> brian@nothing.ucsd.edu (Brian Kant
> |Is there really anyone in the world who doesn't know that the USA is
> |on the continent of North America? Then why is the .NA required?
> |Stupid software?
>
> Stupid people and software, maybe.
>
> Including routing information into mail address will not work and
> should be abandoned immediately.

What do you suggest we replace it with? The 'White Pages' system isn't stable enough or rigorous enough to provide an alternative database, not to mention that it doesn't allow for 'temporary' addresses(e.g. say I go back to WV for a visit for a month, and take my packet equipment with me. I post messages from a WV PBBS and expect to receive replies back to that PBBS. As the replies wing their way back to WV, some PBBS checks its database and says "Hey, NJ8J's home PBBS isn't W8SP, it's W4QO", and re-addresses the message. Grrrr.).

Personally, I don't think the amateur packet system has the bandwidth for an alternative at this time.

Tell me, what is the alternative we should be using, and how do you propose we migrate from the current system to the new system? (It's not just good enough to come up with a better idea - you've got to provide a method for allowing the old system and the new system to co-exist. You've got to allow for time for PBBS authors to decide if they think the new system is worth recoding for, and for PBBS sysops to decide if the new system is worth switching to. Like USENET, there is no central authority that can say, "You must switch to the new system". New techniques must prove their worth on a sysop-by-sysop basis, and if you want to change the entire world-wide packet network, you'll have to convince a sizable enough majority that the rest of the network will be forced to follow. This will take time, and during that time, the old and the new system must be able to co-exist and co-operate. 'Immediate' changes to the world-wide packet system are not now possible, if indeed they ever were.

Ben

+--------------------------------------+---------------------------------+
Ben Coleman NJ8J	"All that is not eternal is
AX.25: NJ8J@W4QO.#EAL.#ATL.GA.USA.NA	eternally out of date."
Internet: ben@nj8j.atl.ga.us	C. S. Lewis

813. HAM-server index file

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-22 10:40:43 UTC
From: HAMSinfo@GRAFex.sbay.org
Message-ID: <gate.753964843@GRAFex.sbay.org>
Source record: 51106
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc

```
Executed: Mon Nov 22 05:40:35 1993

NOTES: ----------------------------------------------------------------------

Mac Catch 22: .HQX files need to be de-binhexed. All others must be
uudecoded. Order UUTOOL.HQX for uudecode tool.

If you do not know how to use HAM-server, send email to
HAM-server@GRAFex.sbay.org. In the text, place HELP.

If you order a file and do not get it, check the index to be sure you have
spelled the filename correctly. If you have ordered the file correctly,
then order a new INDEX, as I may have moved the file to a different
directory. The system is still expanding, and I am trying to keep it in
managable chunks.

Also, if you have ordered files from HAM-server and do not receive them, it
might be because your return path is incorrect. My bounce mailbox fills up
quite regularly with bounce messages. And, since the path is incorrect, I
cannot contact you to let you know.

Orders must be sent to HAM-server. Orders sent to KA6ETB or HAMSinfo are
ignored. If you are reading this from usenet, do not respond to this post.
You must send email to HAM-server@GRAFex.sbay.org.

A new INDEX is automatically generated weekly and when files are moved or
added.

The archives may contain the same file under different names. If you should
run across one of these, please let me know with email to
KA6ETB@GRAFex.sbay.org

-------------------------------------------------------------------------------

Directory: /hamradio/

00-INDEX.TXT 10155 11-21-93

Directory: /hamradio/10meters/

10MBEACO.LST 6233 3-26-93

Directory: /hamradio/advanced/

ADV21.ZIP 103501 6-18-93
ADVANCED.FRQ 1275 8-15-91

Directory: /hamradio/antennas/
```

ANTENNAS.BAS 2227 3-26-93
ANTENNAS.TXT 7771 2-02-93
BUTERNUT.TXT 6106 3-26-93
CRPT2NTA.TXT 10713 2-02-93
DISCONE.TXT 1805 3-26-93
LOADPOLE.ZIP 7542 3-01-93
MININEC3.ZOO 164929 3-01-93
MOBILE.TXT 4458 3-26-93
PORTABLE.ANT 1735 5-26-93
YAGIMAX.ZIP 352305 3-01-93

Directory: /hamradio/arrl/

ARRLBBS.TXT 3153 3-03-93
ARRLDIGI.TXT 23303 2-02-93
ARRLINDX.TXT 17591 3-02-93
ARRLINFO.TXT 3321 2-02-93
ARRLJOB.TXT 18455 2-02-93
ARRLLOGO.PS 2911 2-02-93
ARRLPIO.TXT 116131 2-02-93
QSLBURO1.TXT 14440 2-02-93
QSLBURO2.TXT 10117 2-02-93

Directory: /hamradio/bandplan/

BANDPLAN.DOC 2528 3-24-92
PLAN129.TXT 1928 8-12-91
PLAN222.TXT 585 12-22-91
PLAN2M.TXT 522 8-12-91
PLAN440.TXT 572 8-12-91
PLAN6M.TXT 249 8-12-91
PLAN900.TXT 1108 8-12-91

Directory: /hamradio/callbook/

CALBK-WP.TXT 4064 8-17-92
CALLBOOK.C 18991 3-26-93
CLBK-ARY.TXT 1592 12-28-90
CLBK-EYH.TXT 1480 3-07-93
CLBK-INT.TXT 2280 3-06-93
CLBK-IYA.TXT 556 11-23-91

Directory: /hamradio/contests/

CONTEST.ARC 25065 3-01-93
CONTEST.ZIP 147989 3-01-93
CT626.ZIP 178372 3-01-93
UNIGRID2.BAS 12341 3-26-93
WHATSON.ARC 15826 3-01-93
WLOGDEMO.ZIP 163276 3-01-93
WRTLOG60.ZIP 836615 6-08-93

Directory: /hamradio/dx/

AUTOLOG4.ARC 165621 3-01-93
DXB20DMO.ZIP 129658 3-01-93
DXCC.ARC 10079 11-11-93
DXCC.LIS 15783 11-11-93
DXCC104.ARC 120117 3-01-93
DXCCK2DI.TXT 15904 2-02-93
DXCCTXT.Z 7080 11-11-93
DXLOCATE.LST 35911 3-26-93
DXLOG185.ZIP 171738 3-01-93
HAM_LOG.ZIP 94848 3-19-93
HFPROP.BAS 12300 3-26-93
LOGBOOK.ARC 104668 3-01-93
LOGBOOK.ZIP 83422 3-19-93
SLOVENIA.FRQ 4150 10-03-93

Directory: /hamradio/exams/

AUTOEXAM.ZIP 251630 3-01-93
EXAMCRDT.TXT 6490 2-02-93
EXAM_OPS.TXT 7431 2-02-93
HAMQUIZ.ZIP 101015 3-19-93
HAMSTACK.TXT 3439 2-02-93
HANDICAP.TXT 9632 2-02-93
VEFC24.ARC 26774 3-01-93

Directory: /hamradio/extra/

EXT21.ZIP 99672 6-18-93
EXTRA.FRQ 1157 8-25-91

Directory: /hamradio/general/

GEN012.ZOO 24160 6-18-93
GEN21.EXE 83879 3-19-93
GEN21.ZIP 72931 6-18-93
GENTEST.EXE 136865 1-11-92

Directory: /hamradio/help/

BCUMAHAM.TXT 5156 3-28-93
BITFTP.HLP 11347 5-09-93
ELMER100.ZIP 65425 3-01-93
ELMERS.DIR 46722 3-07-93
ELMRINFO.TXT 6984 2-02-93
ELMRLIST.TXT 46722 3-07-93
FAQ_HAM1.TXT 20412 2-02-93
FAQ_HAM2.TXT 33497 2-02-93
FAQ_HAM3.TXT 86169 3-07-93

Directory: /hamradio/hf/

COMB6.ZIP 43190 3-01-93
GC103.ARC 23776 3-01-93
MICROMUF.BAS 4881 3-01-93

MICROMUF.PAS 7695 3-01-93
SOL_GEO.DAT 24836 2-02-93
SOL_TERA.TXT 27028 2-02-93

Directory: /hamradio/internet/

FTPSITES.TXT 3480 6-06-93
GATEWAYS.TXT 5785 2-02-93
HAMEMAIL.TXT 223537 2-02-93
MAILGATE.TXT 22734 11-18-93
NEWSGRPS.TXT 6917 2-02-93
RECINFO.TXT 9252 3-14-93
USNETSEL.TXT 8164 2-02-93

Directory: /hamradio/macstuff/exams/

ADVANCED.SIT 133986 4-11-93
EXTRA.SIT 128944 4-11-93
GENERAL.SIT 97148 4-11-93
NOVICE.SIT 121453 4-11-93
TECH.SIT 107031 4-11-93
TESTS.SEA 751360 11-11-93
TSTADVAN.HQX 536625 11-11-93
TSTEXTRA.HQX 476347 11-11-93
TSTGEN.HQX 320149 11-11-93
TSTNOV.HQX 409007 11-11-93
TSTTECH.HQX 341519 11-11-93

Directory: /hamradio/macstuff/misc/

FRQVALET.HQX 114671 11-21-93
MACSOFT.TXT 28948 11-21-93

Directory: /hamradio/macstuff/morse/

CODE1_0.HQX 44302 11-11-93
CODETUTR.HQX 23957 11-11-93
CWXTXT.SEA 31748 11-11-93
MAC525_1.HQX 89968 8-17-93
MAC535.HQX 122083 8-17-93
MANIA.HQX 48803 11-11-93
MASTER.HQX 58146 11-11-93
MCMORSIT.HQX 78187 11-21-93
MORSE.MAC 263 3-02-91
MORSE.HQX 16369 11-11-93
MORSE1_1.HQX 16568 11-11-93
MORSETUT.SEA 29857 11-11-93
TRAINER.HQX 121407 11-11-93

Directory: /hamradio/macstuff/packet/

SAVANTDM.HQX 178005 8-17-93
SAVNTUPD.HQX 80757 8-17-93

Directory: /hamradio/macstuff/tcpip/

SOFTKISS.HQX 145274 8-17-93

Directory: /hamradio/macstuff/tcpip/mac-nos/

CONFIG.HQX 424 9-27-93
IM10B27N.HQX 483 9-27-93
NET2325.CPT 198493 9-27-93
NET2325.HQX 325 9-27-93
NET2326.CPT 198431 9-27-93
NET2326.HQX 330 9-27-93
NOSINTRO.MSW 69121 4-23-92
TCP_IP.SIT 172688 9-27-93

Directory: /hamradio/macstuff/utility/

CPTXPAND.HQX 18256 11-21-93
DEARJ.SIT 14776 11-18-93
MACGZIP.CPT 140672 11-18-93
STUFLITE.BIN 465987 11-18-93
UUTOOL.HQX 76605 11-18-93

Directory: /hamradio/misc/

9PN-25PN.TXT 676 3-27-93
AUTOLOG.ZIP 109886 3-19-93
BATTRIES.TXT 9694 2-02-93
BBS_LIST.TXT 41800 2-28-93
BEACONS.INF 2284 7-29-92
CA-PHONE.BBS 1338 11-06-92
CHART.C 1999 3-26-93
CHURCVR.TAR 491520 8-04-93
CONDOR.INF 2870 9-26-92
CONDORMP.TXT 3486 7-16-89
EASYLOGR.ZIP 228482 3-19-93
ELMER.INF 9129 11-21-93
ELMER.LST 53132 11-21-93
FCC-PRB1.TXT 25754 4-05-93
FIELDDAY.EXE 239510 11-11-93
FLNTALAW.TXT 3528 2-02-93
HAMPLTES.TXT 5507 2-02-93
HAM_READ.ARC 1366 3-19-93
K1EA-619.EXE 315212 3-19-93
K2UYH.ARC 108510 3-19-93
LOGOS.PS 9258 2-02-93
MAILORDR.TXT 20383 2-02-93
MAP.ZIP 802214 3-19-93
MARS.FRQ 987 8-28-93
NICADS.INF 6533 3-26-93
PRO-2004.MOD 4418 3-26-93
PRO-2004.REV 18797 3-26-93
QSLCARD1.PS 27337 3-26-93

QSLCARD2.PS 6399 3-26-93
RFI.TXT 1991 3-17-93
RFI001.TXT 2158 6-08-89
RFI002.TXT 1815 6-08-89
RFI003.TXT 3288 6-08-89
RFI_TIPS.TXT 5948 2-02-93
SCANNER.MOD 5287 3-26-93
SMITHCHA.PS 23664 3-26-93
UC-U2AT.REV 7239 3-26-93
VHFPROP.BAS 24498 3-26-93

Directory: /hamradio/mods/

2ETO2AT.MOD 1443 8-07-93
56KBFIX.MOD 1093 5-26-93
741AMODS.ZIP 8974 5-26-93
760XLT.MOD 490 5-26-93
ALLBAND.MOD 2870 5-26-93
ALR22T.MOD 2152 5-26-93
BC205XLT.MOD 4221 5-26-93
DJ-580 155310 5-26-93
DJ500.MOD 2885 5-26-93
DR510.MOD 4186 5-26-93
FRQSGALR.ZIP 206290 5-26-93
FT-530.MOD 2302 8-07-93
FT101E.MOD 2639 5-26-93
FT209RH.MOD 1034 5-26-93
FT212RH.MOD 1345 5-26-93
FT23R.MOD 776 5-26-93
FT411.MOD 4824 5-26-93
FT411-2.MOD 1026 5-26-93
FT470-2.MOD 9942 5-26-93
FT470-3.MOD 1951 5-26-93
FT4700.MOD 1195 5-26-93
FT727CAT.MOD 2520 5-26-93
FT727R.MOD 1071 5-26-93
FT747GX.MOD 1221 5-26-93
FT767GX.MOD 1452 5-26-93
HT-24-T.MOD 3581 7-24-93
IC-24.MOD 2071 5-26-93
IC-MU2.MOD 1186 5-26-93
IC02.MOD 2082 5-26-93
IC02-2.MOD 1231 5-26-93
IC02-3.MOD 861 5-26-93
IC04.MOD 1897 5-26-93
IC24-2.MOD 993 5-26-93
IC24-3.MOD 5387 5-26-93
IC2410.MOD 4437 5-26-93
IC28.MOD 479 5-26-93
IC2SAT.MOD 4994 5-26-93
IC2SAT-2.MOD 8131 5-26-93

IC32.MOD 2501 5-26-93
IC32-2.MOD 2719 5-26-93
IC3200A.MOD 452 5-26-93
IC37.MOD 3900 5-26-93
IC735IBM.MOD 1407 5-26-93
IC900.MOD 2945 5-26-93
ICOM32AT.MOD 1937 5-26-93
ICOM735.1 3614 5-26-93
ICOM735.2 1380 5-26-93
ICOM735- 3614 5-26-93
ICW2A.MOD 13392 5-26-93
KAMDCD.MOD 2048 5-26-93
KENWD930.MOD 6640 5-26-93
NOAASTNS.ZIP 20995 5-26-93
PK232LOK.MOD 1858 5-26-93
PORTABLE.ANT 1735 5-26-93
PRO2004.MOD 5157 5-26-93
PRO2005.MOD 2602 5-26-93
PRO2006.MOD 3119 5-26-93
PRO2020.MOD 4775 5-26-93
PRO34.MOD 1239 5-26-93
R7000.MOD 3404 5-26-93
R7000-2.MOD 26880 5-26-93
RADIO.MOD 4915 5-26-93
RDIOMODS.SRV 956 5-26-93
TC2DUPLX.MOD 1581 5-26-93
TH-215A.MOD 2174 3-26-93
TH215 2072 5-26-93
TH215.MOD 2227 5-26-93
TH225.MOD 2932 5-26-93
TH25.MOD 7811 5-26-93
TH27A 6725 5-26-93
TH28A 2608 5-26-93
TH75.MOD 1385 5-26-93
TINY2TNC.MOD 1431 5-26-93
TM-721A.MOD 4867 3-26-93
TM-741-M 17526 5-26-93
TM2570A.MOD 778 5-26-93
TM321A.MOD 600 5-26-93
TM321A-2.MOD 957 5-26-93
TM321A-3.MOD 1415 5-26-93
TM421A.MOD 1836 5-26-93
TM701.MOD 2979 5-26-93
TM701A.MOD 280 5-26-93
TM721.MOD 4228 5-26-93
TM721-2.MOD 2784 5-26-93
TM721-3.MOD 6073 5-26-93
TM721A 13389 5-26-93
TM731.MOD 1612 5-26-93
TM741.MOD 1230 5-26-93

TM941A-2.MOD 2723 5-26-93
TNC2.MOD 1589 5-26-93
TNC2A.MOD 3329 5-26-93
TS-930S.MOD 2226 3-26-93
TS140.MOD 563 5-26-93
TS430.MOD 825 5-26-93
TS430-2.MOD 844 5-26-93
TS430MOD.DOC 2719 3-26-93
TS430S.REV 5066 3-26-93
TS440.MOD 1589 5-26-93
TS440-AT.MOD 971 5-26-93
TS440S.INT 9986 3-26-93
TS680.MOD 514 5-26-93
TS680-2.MOD 2940 5-26-93
TS711.MOD 123 5-26-93
TS790A.MOD 5059 5-26-93
TS850-1.MOD 12088 5-26-93
TS850-2.MOD 9086 5-26-93
TS930.MOD 6931 5-26-93
TS940IBM.MOD 2539 5-26-93
U2AT.MOD 3161 5-26-93
UNI2510.MOD 1622 5-26-93
W21AT.MOD 4330 10-10-93

Directory: /hamradio/morse/

AUTOCW.ARC 60849 3-01-93
CODETEST.HIN 7287 3-26-93
CW.ARC 62536 3-01-93
CW104.ZIP 83367 3-01-93
CWDEMO.ZIP 573318 11-11-93
FFTMORSE.ZIP 27344 3-01-93
HAMCOM21.ZIP 182531 3-01-93
MACHINE.ARC 13061 3-01-93
MOR21.ZIP 53013 6-18-93
MORSE.BAS 5661 3-01-93
MORSE30B.ZIP 71113 3-01-93
MORSETST.BAS 7179 3-01-93
PROCW.ZIP 24227 3-01-93
ROBOCOPY.ZIP 27346 3-01-93
SM316.ZIP 109484 3-01-93

Directory: /hamradio/mswin/

DSP2D_UP.ZIP 26368 11-11-93
GMAIL.TXT 110 11-11-93
GMAIL.ZIP 78712 11-11-93
ICMPCMD.ZIP 3294 11-11-93
MSWINNOS.ZIP 4014 11-11-93
NETSORT.ZIP 1505 11-11-93
QVTNET23.ZIP 212649 11-11-93

```
RTSORT.ZIP 8192 11-11-93

Directory: /hamradio/newfiles/

AMPR.ORG 409718 7-06-93
FRQSGALR.ZIP 206290 5-26-93
NETAMSRC.ARC 56320 9-29-93
NETMAC52.SIT 178633 9-29-93
NETMAC55.SIT 179770 9-29-93
NET_AMIG.ARC 108322 9-29-93
NET_BM.ARC 37772 9-29-93
NET_DES.ARC 26249 9-29-93
NET_DOC.ARC 143194 9-29-93
NET_EW.ARC 115955 9-29-93
NET_MAC.HQX 223461 9-29-93
NET_READ.ME 2443 9-29-93
NOAASTNS.ZIP 20995 5-26-93
NOS_KIT.DOC 4313 11-05-93
NOS_KIT.ZIP 659372 11-05-93
NTEX_MS.ARC 118873 3-19-93
PCECAP.ZIP 100174 3-19-93
TEC20.ZIP 88796 3-19-93
TEC21.EXE 95783 3-19-93
TRAVINFO.LST 38204 3-26-93
TUNEUP.TNC 2557 7-03-91
UC-U2AT.REV 7239 3-26-93
WIRETAP.TXT 32215 3-26-93

Directory: /hamradio/novice/

NOV21.EXE 106365 3-19-93
NOVICE25.ARC 50049 3-01-93
NOV_TEST.ZIP 95588 3-01-93

Directory: /hamradio/nts/

3RDPARTY.LST 1802 9-09-91
CANADA.ADR 375 2-14-90
COUNTRY.ADR 2975 11-25-91
NTS12.ZIP 93145 6-18-93
NTSDISK.EXE 37401 11-20-91
RGRAM27.ZIP 48027 3-19-93
ZIPKEY.ZIP 198368 11-11-93

Directory: /hamradio/os2/

OS2NOSV4.ZIP 262476 11-11-93
OS2PMAIL.ZIP 36178 11-11-93
OS2SPEED.ZIP 2050 11-11-93
PMNOS1DS.ZIP 843122 11-11-93
PMNOS1DX.ZIP 377128 11-11-93

Directory: /hamradio/packet/
```

9600BAUD.PKT 8154 3-06-91
A802MANP.TXT 35627 8-10-93
AMTORFRQ.TXT 9158 10-13-93
ARYGATE.TXT 10286 4-11-93
AUTOBPQ.ZIP 92993 9-04-93
AX25SPEC.TXT 66235 3-30-93
BBSTIP01.TXT 1435 1-04-91
BBSTIP02.TXT 1868 1-04-91
BBSTIP03.TXT 1869 1-04-91
BBSTIP04.TXT 2032 1-04-91
BBSTIP05.TXT 2196 1-04-91
BBSTIP06.TXT 1132 1-04-91
BBSTIP07.TXT 1180 1-04-91
BBSTIP08.TXT 863 1-04-91
BBSTIP09.TXT 2260 1-04-91
BBSTIP10.TXT 1325 1-04-91
BBSTIP11.TXT 1755 1-04-91
BBSTIP12.TXT 2222 1-04-91
BBSTIP13.TXT 2305 1-04-91
CATEGORY.LST 3477 1-26-92
CHEAPPKT.TXT 4258 3-30-93
FAQ.TXT 33570 3-08-93
FAQ_PAKT.TXT 29942 2-02-93
HFBBS.TXT 19833 10-13-93
HFHINTS.TXT 3020 4-05-90
HI-SPEED.NET 15864 8-07-93
HIERADR.DOC 4849 6-15-90
INFOPAKT.TXT 39574 2-02-93
KAM401.ARC 156061 3-01-93
NEXTGEN.BBS 3948 3-21-93
PKTINFO1.TXT 2891 2-20-93
PKTINFO2.TXT 6338 2-02-93
ROUTING.TXT 28069 3-26-93
RTTY12G.ARC 126651 3-01-93
SETTINGS.TNC 1089 7-03-91
TTY37.ARC 36600 3-01-93
WP.DOC 1507 5-09-93
XPCOM131.ZIP 403741 5-29-93

Directory: /hamradio/packet/loz/

00-INDEX.TXT 2446 4-19-93
PACKET01.LOZ 3746 3-03-93
PACKET02.LOZ 9436 3-04-93
PACKET03.LOZ 6675 3-07-93
PACKET04.LOZ 7372 3-10-93
PACKET05.LOZ 6155 3-17-93
PACKET06.LOZ 15037 3-23-93
PACKET07.LOZ 5707 5-11-92
PACKET08.LOZ 6715 5-12-92
PACKET09.LOZ 4578 5-12-92
PACKET10.LOZ 8698 1-31-93

PACKET11.LOZ 6493 1-31-93
PACKET12.LOZ 5881 5-13-92
PACKET13.LOZ 6285 5-29-92
PACKET14.LOZ 7157 5-13-92
PACKET15.LOZ 4714 5-14-92
PACKET16.LOZ 3396 5-14-92
PACKET17.LOZ 4683 5-14-92
PACKET18.LOZ 2168 5-14-92
PACKET19.LOZ 4902 5-15-92
PACKET20.LOZ 7564 5-15-92
PKTINF01.TXT 4109 7-22-91
PKTINF02.TXT 6580 7-28-91
PKTINF03.TXT 4555 8-06-91
PKTINF04.TXT 3806 8-12-91
PKTINF05.TXT 4484 8-21-91
PKTINF06.TXT 4192 9-03-91
PKTINF07.TXT 4885 9-09-91
PKTINF08.TXT 4676 9-17-91
PKTINF09.TXT 3938 10-01-91
PKTINF10.TXT 2786 10-28-91
PKTINF11.TXT 3412 11-12-91
PKTINF12.TXT 7717 11-26-91
PKTINF13.TXT 2480 12-17-91
PKTINF14.TXT 2499 1-06-92
PKTINF15.TXT 2975 1-06-92
PKTINF16.TXT 1646 1-14-92

Directory: /hamradio/packet/mlhacker/

MLH01.TXT 3986 6-03-93
MLH02.TXT 3631 6-03-93
MLH03.TXT 3933 6-03-93
MLH04.TXT 4815 6-03-93
MLH05.TXT 6136 6-03-93
MLH06.TXT 7803 7-06-93
MLH07.TXT 3665 6-03-93
MLH08.TXT 5446 6-03-93
MLH09.TXT 4449 6-03-93
MLH10.TXT 3827 6-03-93
MLH11.TXT 4224 5-31-93
MLH12.TXT 3072 5-31-93
MLH13.TXT 6512 5-31-93
MLH14.TXT 5248 5-30-93
MLH15.TXT 6231 7-07-93
MLH16.TXT 6272 10-06-93

Directory: /hamradio/packet/software/

APL700.EXE 412928 8-26-93
FE.ZIP 16626 7-14-93
GP.DOC 125349 7-24-93

GP-1X50.ZIP 370518 7-06-93
LLINK220.ZIP 375144 11-21-93
PAX285.ZIP 15395 7-14-93
PCT214.ZIP 378739 3-01-93
PKGOL624.ZIP 323067 3-26-93
PKTSFTWR.TXT 4185 2-02-93
RTTY12G.ARC 126651 3-01-93
SELCAL11.ZIP 12590 3-01-93
TTY37.ARC 36600 3-01-93
XPCOM131.ZIP 403741 5-17-93

Directory: /hamradio/packet/software/aa4re/

AA4REBBS.INF 2654 4-11-93
AA4REBBS.ZIP 357277 3-19-93
B21TANSI.ZIP 3620 5-26-93
BB21HC.ZIP 259837 5-26-93
BB21HL.ZIP 110380 5-26-93
BB21HN.ZIP 358648 5-26-93
BB21HP.ZIP 239199 5-26-93
DOC211.ZIP 99644 5-26-93
HH21H.INF 1377 5-26-93
MBB35SRC.ZIP 72475 5-26-93
MBBIOS35.ZIP 29299 5-26-93
MBBIOS38.ZIP 39704 5-26-93
WATCHDOG.ZIP 8425 5-26-93

Directory: /hamradio/packet/software/dsp/

DOC.ZIP 301000 9-02-93
DSP105.ZIP 46817 9-02-93
DSP4SCHE.ZIP 238499 9-02-93
DSPTIPUP.ZIP 21417 9-02-93
SOURCE.ZIP 671625 9-02-93

Directory: /hamradio/packet/software/g8bpq/

BPQ405E.ZIP 143360 5-26-93
BPQ406.ZIP 170880 5-26-93
BPQ406A.ZIP 20216 5-26-93
BPQ406E.ZIP 181926 5-26-93
RSWD0330.ZIP 66213 5-26-93
RZSW30.ZIP 97411 5-26-93
TFPCX.ZIP 34817 5-26-93

Directory: /hamradio/packet/software/thebox/

BOOTARC.EXE 243874 7-19-93
INSTALL.BAT 174 7-19-93
NOS_1229.EXE 203295 7-06-93
NOS_1229.LP 172009 7-06-93
NOS_1229.MAN 221639 7-06-93
NOS_1229.MAP 75531 7-06-93

NOS_1229.NR 168281 7-06-93
NOS_1229.VER 52 7-06-93
SOURCARC.EXE 131999 7-19-93
SYSARC.EXE 105377 7-19-93
SYSOP15.ENG 65121 7-19-93
UPDATE.BAT 1354 7-19-93

Directory: /hamradio/packet/software/thenet/

THENET.FLA 6498 7-19-93
THENET.INF 4005 7-19-93
THENET.PAR 3692 7-19-93
TNET-X1G.TXT 68 7-19-93
TNET-X1G.ZIP 119680 7-19-93
TNET-X1H.ZIP 123904 7-19-93
TNET-X1J.EXE 218857 11-11-93
TNET-X1J.TXT 280 11-21-93
TNET-X1J.ZIP 335650 11-11-93
X1JDEV.EXE 116275 11-11-93

Directory: /hamradio/packet/software/f6fbb/

FBB515.ZIP 991152 7-30-93
TPK181.ZIP 579533 7-30-93

Directory: /hamradio/packet/software/wa7mbl/

OIZ-UTIL.ARC 64062 7-30-93
REQDIR.ARC 34438 7-30-93

Directory: /hamradio/packet/software/wa8ded/

TNCDED.DOC 29130 7-30-93
TNCDED.HEX 45068 7-30-93
TNCDED.MSG 4116 7-30-93
WA8DED 1004 7-30-93
WA8DED.DOC 14790 7-30-93
WA8DED.ROM 19284 7-30-93

Directory: /hamradio/packet/tcpip/

00-INDEX.TXT 1602 6-08-93
AMPR.ORG 409718 7-06-93
AMPRHOST 303457 7-06-93
AMPRINFO.TXT 5603 2-02-93
AMPRXORG.REV 516969 7-06-93
ASMOBJ.MSG 607 6-08-93
ASMOBJ.ZIP 6766 6-08-93
BMEXE332.ZIP 30898 6-08-93
BMSRC_ST.ARC 25334 8-07-93
CONNEX.Z 12030 7-06-93
E920603.ZIP 189423 6-08-93
EXPIRY.ZIP 53196 6-08-93

HELP_V02.ZIP 11984 7-06-93
INTRONOS.ZIP 54272 7-06-93
MAN-9106.ZIP 57169 6-08-93
NAN24HYC.ZIP 42635 6-08-93
PCNET.EXE 227498 4-26-92
PKTDRVR.INF 157 6-08-93
S920603.ZIP 656302 6-08-93
SATTRACK.ZIP 34886 7-06-93
SLFP123.ZIP 30476 6-08-93
TCPIP.INF 5818 6-02-93
VIEW9206.ZIP 384591 6-08-93

Directory: /hamradio/packet/tcpip/bm/

BM.DOC 16641 9-02-93
BM332C.TXT 235 9-02-93
BM332C.ZIP 52889 9-02-93
BMEXE.ARC 38547 9-02-93
BMH02.TXT 790 9-02-93
BMH02EXE.ZIP 300305 9-02-93
BMH02SRC.ZIP 60096 9-02-93
BMUTIL.ZIP 11546 9-02-93
VIEW0207.ZIP 320436 9-02-93

Directory: /hamradio/packet/tcpip/docs/

BEGIN.DOC 110255 2-07-91
FAQ-1292 75121 7-06-93
INTRONOS.ZIP 54272 7-06-93
KA9QBGN.ZIP 190366 6-08-93
KA9QNOS.NR 141577 7-06-93
KA9QNOS.PS 133704 7-06-93
NETNIX.PS 286542 7-06-93
NOSBGNLP.ZIP 57488 7-06-93
NOSBGNPS.ZIP 137021 7-06-93
RSPF22P.TXT 85164 7-06-93
TAPR92.TXT 72334 7-06-93
TAPR9600.MOD 11209 7-06-93
TDMA.TXT 12713 7-06-93
USERMAN.ZIP 112344 7-06-93

Directory: /hamradio/packet/tcpip/g1emm/

G1EMMKIT.EXE 168079 7-06-93
G1EMMKIT.ZIP 213973 7-06-93
KH113016.EXE 193643 7-06-93
KH113016.ZIP 593938 7-06-93
PCELM21.ZIP 116682 7-06-93
READ.ME 1077 7-06-93
SMALLEMM.EXE 134945 7-06-93

Directory: /hamradio/packet/tcpip/gpsnos/

GPSC1DOC.ZIP 38361 7-30-93
GPSC1EXE.ZIP 162104 7-30-93
GPSC1HLP.ZIP 13415 7-30-93
GPSC1SRC.ZIP 638737 7-30-93

Directory: /hamradio/packet/tcpip/gracilus/

GCALLBK.TXT 440 7-06-93
GCALLBK.ZIP 13914 7-06-93
GRAC20M2.ZIP 539910 7-06-93
P10DVR.TXT 824 7-06-93
P10DVR.ZIP 25230 7-06-93
P10R30E.TXT 29184 7-06-93
P10R30E.ZIP 291851 7-06-93
TWINDV21.ZIP 38656 7-06-93

Directory: /hamradio/packet/tcpip/nos/

KIT_SRC.TXT 4191 11-05-93
KIT_SRC.ZIP 39567 11-05-93
NOS-SLFP.ZIP 310211 6-08-93
NOSVIEW.ZIP 1764 7-06-93
NOSVW304.ZIP 682322 7-06-93
ROSE-NOS.ZIP 18050 7-06-93

Directory: /hamradio/packet/tcpip/nos-kit/

KIT_SRC.TXT 4191 10-27-93
KIT_SRC.ZIP 39567 10-27-93
NOS_KIT.DOC 4313 10-27-93
NOS_KIT.ZIP 659372 10-27-93

Directory: /hamradio/packet/tcpip/pa0gri/

GR-BUGS.BEE 5120 7-06-93
GR-NOTES.BEE 19584 7-06-93
GRIBEE08.ZIP 831616 7-06-93
GRNOS08.ZIP 268800 7-06-93
GRNOS08S.ZIP 257408 7-06-93
NOS_1229.DOC 172009 7-06-93
NOS_1229.EXE 203295 7-06-93
NOS_1229.MAN 221639 7-06-93
NOS_1229.MAP 75531 7-06-93
NOS_1229.ROF 168281 7-06-93
NOS_1229.VER 52 7-06-93
NOS_1229.ZIP 821866 7-06-93
RSPF0826.TXT 294 7-06-93
RSPF0826.ZIP 53695 7-06-93

Directory: /hamradio/packet/tcpip/pe1chl/

920420.DIR 6353 7-06-93
920420LT.ARC 175565 7-06-93
920420MT.ARC 111710 7-06-93

920420TC.ARC 153934 7-06-93
920420TP.ARC 104054 7-06-93
920420TS.ARC 113244 7-06-93
AUTOEXEC.DRS 2321 7-06-93
HISTORY.ARC 48620 7-06-93
NETDOC1.ARC 16485 7-06-93
NETDOC2.ARC 44672 7-06-93
PACSAT.ARC 87474 7-06-93
PB920430.ZIP 131138 7-06-93
PE1CHL.NET 417 7-06-93
README.CHL 384 7-06-93
SCCPRIN5.ARC 159020 7-06-93

Directory: /hamradio/packet/tcpip/wg7j/

JNOS107B.EXE 283045 7-06-93
JNOS107B.ZIP 987123 7-06-93
WG7JDOC.ZIP 46266 7-06-93

Directory: /hamradio/rigs/

COMPICOM.TXT 15707 3-26-93
FRGLOD10.ZIP 14451 4-01-93
HF_RIGS.TXT 4317 2-02-93
HT_INFO.TXT 10990 2-02-93
IC-12AT.REV 6682 3-26-93
IC-32AT.MOD 2715 3-26-93
IC02A.MOD 2424 3-26-93
IC02ATR.MOD 3294 3-26-93
IC28H.REV 6855 3-26-93
ICOM.C 9232 3-14-93
ICOM-110.C 9842 3-26-93
ICOMCI-V.CMD 7443 3-26-93
INFOEQPT.TXT 10063 2-02-93
KENWD930.MOD 6640 3-26-93
MNUFCTRS.TXT 5051 2-02-93
QST_REVW.TXT 41097 2-02-93
R7000.HIN 26430 3-26-93

Directory: /hamradio/satelite/

DOVE3W13.ZIP 43150 3-01-93
ELETRANS.C 2176 3-26-93
GEOSAT20.ZIP 56405 3-01-93
HAM_SAT.TXT 10967 2-02-93
ORBIT23.ARC 36852 3-01-93
PROTOCOL.1 39022 6-19-89
PROTOCOL.2 2157 6-19-89
QUICKS24.ZIP 77120 3-01-93
SATELITE.BAS 5642 3-01-93
SATELITE.HOW 18571 3-26-93
SATTAIM.ARC 1860 3-01-93

SATTRACK.INF 5017 3-26-93
SATTRACK.ZIP 34886 11-11-93
TRAK280.ZIP 346847 3-01-93
USAT92B2.ZIP 86782 3-01-93
WU120EXE.ZIP 222368 3-01-93

Directory: /hamradio/satelite/arsene/

ARSENE.TXT 1968 7-19-93
TELEM14G.ZIP 29363 7-19-93
TELEM14H.ZIP 29447 7-19-93
TELEMENG.ZIP 39938 7-19-93
TELEMFRA.ZIP 40680 7-19-93

Directory: /hamradio/sstvfax/

AUTOFAX.ARC 12452 3-01-93
FFT.COM 52096 2-02-93
FFTH.COM 53760 2-02-93
JVFAX50.ZIP 407934 3-01-93
SSTVFAX2.ZIP 28323 3-01-93
SSTVWFAX.TXT 37309 2-02-93
WEFAX.ARC 35968 3-01-93
WXRDR22.ARC 98944 3-01-93

Directory: /hamradio/swl/

FAQ_SWL.TXT 21936 2-02-93
SWL114.ZIP 302908 3-01-93
SWL_INFO.TXT 20666 2-02-93

Directory: /hamradio/technici/

TEC22.ZIP 74516 6-18-93
TECHTEST.EXE 148542 1-11-92

Directory: /hamradio/utility/

ARJ230NG.EXE 200704 6-18-93
ARJ241A.EXE 223856 8-07-93
BOOZ.ZIP 12639 6-18-93
COMP16.ZIP 16102 6-18-93
COMP430D.ZIP 20241 6-18-93
FILTER11.ARC 55936 3-01-93
INTMOD60.ARC 11902 3-01-93
JLEM.ZIP 14846 2-02-93
OHMSLAW.ARC 22197 3-01-93
PDZIP.ZIP 63473 6-18-93
PKUNZIP.EXE 23528 3-15-90
PKUNZIP2.EXE 28806 5-17-93
QEXTRACT.ZIP 43123 6-18-93
RC85PR15.ZIP 50983 3-01-93
RFTOOLS.ARC 144799 3-01-93

```
UNARJ230.ZIP 39074 6-18-93
UNZIP.EXE 26838 6-18-93
UNZIP41.ARC 121470 6-18-93
UNZIP41.EXE 21933 6-18-93
UUDECODE.BAS 5709 3-28-93
UUDECODE.C 5565 3-28-93
UUDECODE.DOC 519 3-28-93
UUDECODE.DBG 4658 11-21-93
UUEXE521.ZIP 32455 8-24-93
WHERITIS.ARC 30943 3-01-93
ZIP.EXE 59260 6-18-93
ZIP10EX.ZIP 158335 6-18-93
ZOO210.EXE 55721 6-18-93

Directory: /hamradio/vlf/

1750MTR.TXT 6532 2-02-93
```

814. Thanks for the help

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-22 11:00:00 UTC
From: stocker@nssdca.gsfc.nasa.gov
Message-ID: <22NOV199307004442@nssdca.gsfc.nasa.gov>
Source record: 51101

I'd like to take this opportunity to publicly thank all the people who responded to my call for assistance with the "problem" I was having getting my MFJ-1270B to talk to my computer. I tried all the approaches unfortunately none of them worked.

It turns out that the TNC had somehow gotten set in KISS mode (a mode I knew it had but isn't even documented in the documentation). Even though I pulled the battery jumper it hadn't reset itself. I was pretty sure that I had the jumper out the 30sec the manual suggested. I guess I should have left it out longer.

Anyway a colleague used his NOS program to reset the TNC and it is working just fine. Don't want to tell you how many hours I spent check the serial line, etc.

Thanks again for all the help it was very useful in the diagnostic process.

Erich
n3oxm

815. Re: Internet vs. PBBS namespaces (was Re: wb7tpy gateway)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-22 11:19:19 UTC
From: kenji@k2r.or.jp
Message-ID: <KENJI.93Nov22201919@reseau.k2r.or.jp>
Source record: 51099

Patty Winter focused quite well about what I really wanted to say.
Lemme give another two yen -

In article <2cln6c$bfl@apple.com> winter@apple.com (Patty Winter) writes:
|Because of the increasing interaction between the Internet and
|the PBBS system, it matters a lot more than a whit. When people
|see two sets of addresses that look nearly identical in format,
|*they're going to mix them up occasionally.* Why shouldn't PBBS
|sysops make a simple change (in this case, from NA to NOAM) that
|can prevent the problem?

And I also insist PBBS network should obtain approved Internet domain
naming space - like ampr.org and fidonet.org, or at least use UNIFIED
pseudo-domain for ALL PBBS hosts. NOAM is not enough for me - I'm in
Asia. :)

// Kenji

--
Kenji Rikitake <kenji@k2r.or.jp> <kenji@rcac.astem.or.jp> (More available!)
Persuade me you may, but I won't be persuaded. -- Aristophanes

816. Re: wb7tpy gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-22 11:29:44 UTC
From: kenji@k2r.or.jp
Message-ID: <KENJI.93Nov22202944@reseau.k2r.or.jp>
Source record: 51100

In article <2cp3dk$lls@unicorn.ccc.nottingham.ac.uk> eeyimkn@unicorn.nott.ac.uk (M. Knell) writes:
|The gateways don't put any part of the packet address onto the
|Internet in any consequential part, so why worry? Just because NA
|happens to correspond to a valid top level domain on the Internet
|doesn't mean that the entire packet network should have to change.

It's not a matter of worrying - it has already become an annoyance to some people who don't care anything about ham radio. I think ham radio people should not bother others. Just because .NOAM happens NOT to correspond to a valid Internet top domain does not mean that .NOAM will be reserved in the Internet for PBBS systems - UNLESS the PBBS network registers itself as a valid subdomain of the Internet.

It was really unfortunate that the PBBS and Internet are using almost the same naming syntax for hosts/objects. But I think it's up to ham radio people whether to solve this problem or not - at least Internet has an open door for the PBBS network to obtain a non-country domain name (e.g. .org or .net).

// Kenji
--
Kenji Rikitake <kenji@k2r.or.jp> <kenji@rcac.astem.or.jp> (More available!)
Persuade me you may, but I won't be persuaded. -- Aristophanes

817. Re: Max BAUD on 6M AM & FM

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-22 14:17:14 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1993Nov22.141714.22356@ke4zv.atl.ga.us>
Source record: 51107

In article <CGuw4x.L0y@fms.com> andrews@fms.com (Andrew Sargent N8OFS) writes:
>In article <1993Nov21.135728.17393@ke4zv.atl.ga.us> gary@ke4zv.UUCP (Gary Coffman)
writes:
>>
>>97.307f(5)
>>A RTTY, data or multiplexed emission using a specified digital code
>>listed in 97.309(a) of this Part may be transmitted. The symbol rate
>>must not exceed 19.6 kilobauds. A RTTY, data or multiplexed emission
>>using an unspecified emission using an unspecified digital code under
>>the limitations listed in 97.309(b) of this Part also may be transmitted.
>>The authorized bandwidth is 20 kHz.
>>
>Yea, that's what my rulebook says. Still sounds like lawyer gibberish
>to me...

Note these are the *plain language* rewrite version of the rules. You
should have seen the old rules. :-)

>>So you're limited to 19.6 kb *and* a maximum bandwidth of 20 kHz.
>>The latter is the real limit for simple modulation encodings such
>>as FSK, or AFSK over AM or FM radios. With current amateur techniques,
>>that's a limit of 2400 baud for AM or FM. The PSK scheme used in 9600
>>baud modems would fit the bandwidth using SSB radios, and MSK would permit
>>16.6 kilobaud. No presently used amateur technique can squeeze 19.6 kilobaud
>>into 20 kHz.
>>
>OK, so 2400 baud is the max using AX.37 packet with commercial FM gear.

Hmm. I meant to comment on this the first go round. I don't know what
AX.37 is. In amateur radio we use *AX25* packet. Note that the 2400 "baud"
modems sold by Kantronics aren't really 2400 baud. They're 2400 bits per
second. See below for discussion.

>>NOTE: For the more complex modulations, baud != bps. You can encode more
>>than one bit with a single baud, thus achieving higher effective bps
>>transfers. 38.4 kbps should be possible with amateur grade techniques.
>>Compression techniques should increase that even further.
>>
>Ummm, wait a minute. I thought encoding and compression was illegal
>because the FCC dosen't think it's standard.

Encoding is legal, else Morse *Code* would be illegal. :-)
What the rules say is that you can't use codes and ciphers with
the *intent* of obscuring the meaning of the transmission, except
for certain telecommand functions where encryption with the intent
of obscuring meaning is allowed. Since the encoding and compression

methods are *intended* to facilitate transmission, not obscure meaning, they are perfectly legal. If you use something that isn't an industry or amateur standard, you have to keep a log entry explaining the encoding with your station records in case the FCC ever wants to know what you're doing. But if you use one of the industry or amateur standard encodings, you have no problem.

If you reread the second half of 97.305f(5) quoted above, you'll see that "unspecified emissions and unspecified codes" are affirmatively allowed. It's standard amateur and industry practice to use bit encodings of multiple bits per baud. The classic example is the 2400 bps V22bis standard. The modem actually runs at 600 baud with 4 bits per baud encoded into the modulation. There are several LZW style compression schemes that are industry or amateur standards, such as Pkzip, that you can use with impunity on the data being fed to the modem, and on-the-fly LZW compression methods like those used in MNP5 and V42bis are also perfectly fine. Also most advanced modems use a data scrambler in order to facilitate good spectrum usage and to aid in clock recovery. This is *not* encryption.

For international contacts only, there is the additional restriction that permission to use unspecified codes must have been granted by both countries. Otherwise, you're restricted to the telegraphic alphabets enumerated in 97.309a (basically Baudot, async ASCII, and the sync code used by AMTOR). Note that packet does *not* use ASCII. It transmits synchronous *octets* of bits that can represent whatever the users want them to represent. We often use padded ASCII in the octets, but that's not required, we also often transmit binary file images via packet.

Gary
--
Gary Coffman KE4ZV | Where my job's going, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | I don't know. It might | uunet!rsiatl!ke4zv!gary
534 Shannon Way | wind up in Mexico. | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -NAFTA Blues |

818. Re: Portable Packet Station with a HP 95LX ???

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-22 14:25:13 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1993Nov22.142513.22449@ke4zv.atl.ga.us>
Source record: 51108

In article <1993Nov21.181843.20678@exu.ericsson.se> lmcifpl@LMC.Ericsson.SE writes:
> I have a 512 kb HP 95LX (palmtop) and will soon become the owner of a
>FT-530 HT. I'm curious about packet and am wondering if any one out there
>has managed to connect these elements with a TNC (and ??) to creat a
>portable packet station, for this is what I'd like to achieve.
>
> What TNC would be recommended? What software is required? What else would
>I need? (And any other questions that a newbie should ask)
>
> My first preference would be for a TNC that is small (cigarette box size)
>battery powered. Second preference would be something that could be carried
>EASILY and set up in seconds in office/apartemnt etc. The memory requirements
>of the software should be low (the 95LX is not powerhouse!).

TASCO and PacComm sell small cigarette pack size modems. The PacComm
unit is TAPR firmware compatable. The comm firmware program built into
the HP 95 will work with these TNCs for ordinary "chat" mode. There is
also a version of the KA9Q TCP/IP program for the HP 95 that will work
with the PacComm unit in KISS mode. The small screen and keyboard of the
HP 95 make it somewhat frustrating to use, but it will work. I'd recommend
an external gell cell battery pack to power the HP 95, TNC, and HT for
extended use.

You can't get hardware flow control with the HP 95, so you need to set
the TNC up for a 3 wire data connection and software flow control, or
no flow control, depending on the software being used.

Gary
--
Gary Coffman KE4ZV | Where my job's going, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | I don't know. It might | uunet!rsiatl!ke4zv!gary
534 Shannon Way | wind up in Mexico. | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -NAFTA Blues |

819. Kenwood TS850 and TNC distortion

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-22 14:31:35 UTC
From: hellman@cbnewsm.cb.att.com
Message-ID: <CGwDos.4zu@cbnewsm.cb.att.com>
Source record: 51102
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc

Several recent postings complained about voice and digital distortion
when using the Kenwood ACC 2 connector. I posted the connections that
I used with my TS 440. Nov '93 QST contains a note from KC6NSE in
Hints and Kinks that deals with this problem for the TS 850. He says
that he cured the problem with his KAM by changing the internal KAM
jumper K5 to HI (from LO). This sets the audio output. Alternatively,
Kenwood has recommended adjusting the TS 850 trimmer VR18 untill
SSB distortion disappears. (This fix is also for the PK 232).
Hope this helps, Shel WA2UBK dara@physics.att.com

820. Re: Max BAUD on 6M AM & FM

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-22 15:08:59 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1993Nov22.150859.22728@ke4zv.atl.ga.us>
Source record: 51110

In article <arog.753911447@BIX.com> arog@BIX.com (arog on BIX) writes:
>gary@ke4zv.atl.ga.us (Gary Coffman) writes:
>[stuff cut]
>>97.307f(5)
>>A RTTY, data or multiplexed emission using a specified digital code
>>listed in 97.309(a) of this Part may be transmitted. The symbol rate
>>must not exceed 19.6 kilobauds. A RTTY, data or multiplexed emission
>>using an unspecified emission using an unspecified digital code under
>>the limitations listed in 97.309(b) of this Part also may be transmitted.
>>The authorized bandwidth is 20 kHz.

>[more stuff cut to end]

>Taken another way, by the rule.of.thumb that the sum of
>twice the deveation plus twice the highest modulating freq
>is the occupied bandwidth, five kc dev in a twenty kc
>channel allows the highest significant modulation to
>be six kc for FM. For AM, its just twice the modulating
>freq, of course.
>
>Now, how high a bps rate can be fit in six kc ?

That's a tough question. MSK gives us the smallest bandwidth
per baud at 1.2 Hz per baud. Obviously direct MSK is preferred
to modulating an FM voice band radio. However, we can do a few
tricks. First we could use a 5 kb MSK audio signal as our baseband
modulation, but that would run into nasty aliasing problems. Or
we could take an alternate approach of using multiple low baud
carriers in parallel in the voice bandwidth. That's the approach
taken by Telebit in their PEP modems. They can transfer 512 bits
in parallel for each clock tick. However, that requires DSP filtering
to deal with the overlapping carriers.

But the issue is bps, not baud. Since we know we can encode several
bits in one baud by using approaches like QAM, we know we can transfer
more than 5 kbps of data in a 5 kb channel. Depending on the S/N ratio
we have to play with, I'd guess we could get an effective throughput of
at least 38.4 kbps in a voice grade channel since phone modems can do
this using n-way encoding and on-the-fly compression. Whether that's
practical on our radio circuits depends on the amount of training
time we can tolerate in each exchange. Certainly for n-way packet
connections, the training time would be a killer. But for dedicated
duplex links we could probably match phone line modem performance
in a voice bandwidth.

Gary
--
Gary Coffman KE4ZV | Where my job's going, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | I don't know. It might | uunet!rsiatl!ke4zv!gary
534 Shannon Way | wind up in Mexico. | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -NAFTA Blues |

821. Re: Max BAUD on 6M AM & FM

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-22 15:14:13 UTC
From: jbloom@arrl.org
Message-ID: <2635@arrl.org>
Source record: 51109

In rec.radio.amateur.digital.misc, gary@ke4zv.atl.ga.us (Gary Coffman) writes:
>In article <CGt9JM.5v9@fms.com> andrews@fms.com (Andrew Sargent N8OFS) writes:
>>
>>I thought this question could easily be answerd by Pt 97, WRONG!
>>
>>I need to know, what is the maximum baud rate (AX.37 packet) using
>>either AM _or_ FM on 6 meters???
>
>Here's what Part 97 has to say about data transmission on 6 meters.
>
>#quote
>
>97.307f(5)
>A RTTY, data or multiplexed emission using a specified digital code
>listed in 97.309(a) of this Part may be transmitted. The symbol rate
>must not exceed 19.6 kilobauds. A RTTY, data or multiplexed emission
>using an unspecified emission using an unspecified digital code under
^^^^^^^^^^^^^^^^^^^^^^^^^^^^^ strike that; it isn't in the rule
>the limitations listed in 97.309(b) of this Part also may be transmitted.
>The authorized bandwidth is 20 kHz.
>
>#end quote
>
>So you're limited to 19.6 kb *and* a maximum bandwidth of 20 kHz.

Ah, no. What the rule says is that when you are using a specified
digital code from 97.309(a), you can send at up to 19.6 kbauds. When
you are using "any digital code" you can send within a 20-kHz bandwidth.
The first two sentences go together; the last two sentences go together.
(This was a lot more obvious before the latest rules rewrite. Old
part 97.69 contained each set of code and signaling restrictions together
in a common subparagraph.)

Now, I realize that this set of rules doesn't make much sense. To
understand why it is the way it is, you have to remember a bit of history
of the rules. Before the present rules, you could send only authorized
codes,and only via FSK or AFSK. Addition of the authorization to send
"any digital code" and using a variety of modulation techniques above HF
was sort of grafted onto the existing rules. The result is a bit, well,
uneven.

Why hasn't it been changed? Because it hasn't proven to be a problem.
When and if it becomes a problem, likely it *will* be changed.

Bottom line: if your packet system on 6 meters is sending only the codes of 97.309(a) (e.g., ASCII), you can run at up to 19.6 kbauds. If you're sending data that doesn't fall within 97.309(a), you have to do so within a 20-kHz bandwidth.

Jon Bloom, KE3Z | jbloom@arrl.org
American Radio Relay League |
225 Main St., Newington CT 06111 |

822. Like Baycom but faster than 1200 baud ?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-22 15:24:27 UTC
From: mike@uxp.bs2.mt.nec.co.jp
Message-ID: <MIKE.93Nov22152427@allegro.uxp.bs2.mt.nec.co.jp>
Source record: 51125

There are a number of designs around for packet modems which connect
direct to a serial or printer port and work with a/software TNC
based on the TCM3105 and Am7910 chips like Baycom and PMP. I have not
seen any mention of similar designs to work at higher speeds such as
9600 bps and am curious as to why not. It would see likely that a
modern PC or small UNIX workstation could could keep up with the
processing required. Have I missed something or are there
technical or price limitations ??
--

Mike Collinson
Assistant Manager, Product Engineering Dept., UX Software Development Div.,
NEC Corporation, Daito Tamachi Building, 14-22 Shibaura 4-Chome,
Minato-ku, Tokyo 108, JAPAN
Email: mike@uxp.bs2.mt.nec.co.jp Fax:+81-3-3456-6675
Tel:+81-3-3456-7451
---

823. ??using ur Kantronics KPC-3 for WX??

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-22 18:06:54 UTC
From: szhall@rosie.ucdavis.edu
Message-ID: <CGwnnJ.1M9@ucdavis.edu>
Source record: 51111

I just bought a KPC-3 for packet radio and I really enjoy it. Does anyone out there us it for WX and if so I have some some questions. Does it work well and do you need a good ant..What kind of software are you using? I don't have any idea what to exspect I don't have any friends who use their KPC-3 for WX. thanks for reading this..73es..Jeff

824. Re: Max BAUD on 6M AM & FM

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-22 19:07:55 UTC
From: CSLE87@maccvm.corp.mot.com
Message-ID: <1993Nov22.192721.12242@schbbs.mot.com>
Source record: 51113

Andrew - You're correct that the FCC doen't regulate the speed of your proposed high-speed data link, but they do limit the bandwidth to that occupied to that of a "communications quality phone emission of the same modulation type." Therefore you are basically stuck with the same audio bandwidth as the comm phone signal, which is 3 kHz, and total channel FM bandwidth of 16 kHz, per the FCC's definition.
What you will find is that the S/N level needs to be >32 dB to run 960 bps on FM (aka 16K0F2D using the official designator) with commercial wireline data modems. Good luck getting that S/N reliably on 6 meters. You will probably also find many folks who disagree with your personal opinion of the condition of the band. Getting along with them is a very important element of cooperative frequency usage and planning. Pick your data channel carefully, lest you incur the wrath of the OFAM Clubs!
------------------------- Original Article -------------------------
From: andrews@fms.com (Andrew Sargent N8OFS)
Newsgroups: rec.radio.amateur.digital.misc
Subject: Max BAUD on 6M AM & FM
Date: Sat, 20 Nov 1993 22:09:21 GMT
Organization: F M Systems, Inc. & Telemax, Inc. Medina, Ohio USA
Lines: 18
NNTP-Posting-Host: skybridge.scl.cwru.edu

Hello all,

I thought this question could easily be answerd by Pt 97, WRONG!

I need to know, what is the maximum baud rate (AX.37 packet) using either AM _or_ FM on 6 meters???

Figuring A) 6 meters is such a mostly dead hunk of band space & B) the availability of 6 meter 25KHz commercial gear; I would probably be able to do quite a high rate of speed (Zoom!!!) :) :) :)

BTW, I'm trying to set up a 100 mile point to point link...

--
Tell Me Something I Don't Know, ! HAM = N8OFS
Show Me Something I Can Use, ! ARMY MARS = AAN5HJT
Push The Buttons, ! CB = THE NEON KNIGHT
Connect The God-Damn Dots!!! - Ministry ! HACKER = TH3 N30N KN16Ht

825. Re: Max BAUD on 6M AM & FM

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-22 19:42:32 UTC
From: CSLE87@maccvm.corp.mot.com
Message-ID: <1993Nov22.195314.12715@schbbs.mot.com>
Source record: 51115

GARY - You did great until you stopped quoting the rules and started
suggesting alternate modes. According to my 1990 rules, you still cannot
occupy more bandwidth than a communications quality signal USING THE
SAME EMISSION MODE. Check restriction 2 - it also applies on 6M!
Thus SSB would be limited to 3 kHz bandwidth, and you won't squeeze 9600
through that small a window on SSB. Your comment on PSK similarly would
require the bandwidth to not exceed that of a voice signal using phase
modulation, and since the FCC regards FM and PM as having the same
width you are OK. Sorry for the correction, but apply ALL the rules! KB
------------------------ Original Article ------------------------
Path: schbbs!mothost!mdisea!uw-coco!uw-beaver!netnews.nwnet.net!ogicse!emory!kd4
From: gary@ke4zv.atl.ga.us (Gary Coffman)
Newsgroups: rec.radio.amateur.digital.misc
Subject: Re: Max BAUD on 6M AM & FM
Message-ID: <1993Nov21.135728.17393@ke4zv.atl.ga.us>
Date: 21 Nov 93 13:57:28 GMT
Article-I.D.: ke4zv.1993Nov21.135728.17393
References: <CGt9JM.5v9@fms.com>
Reply-To: gary@ke4zv.UUCP (Gary Coffman)
Organization: Destructive Testing Systems
Lines: 40

In article <CGt9JM.5v9@fms.com> andrews@fms.com (Andrew Sargent N8OFS) writes:
>
>I thought this question could easily be answerd by Pt 97, WRONG!
>
>I need to know, what is the maximum baud rate (AX.37 packet) using
>either AM _or_ FM on 6 meters???

Here's what Part 97 has to say about data transmission on 6 meters.

#quote

97.307f(5)
A RTTY, data or multiplexed emission using a specified digital code
listed in 97.309(a) of this Part may be transmitted. The symbol rate
must not exceed 19.6 kilobauds. A RTTY, data or multiplexed emission
using an unspecified emission using an unspecified digital code under
the limitations listed in 97.309(b) of this Part also may be transmitted.
The authorized bandwidth is 20 kHz.

#end quote

So you're limited to 19.6 kb *and* a maximum bandwidth of 20 kHz.
The latter is the real limit for simple modulation encodings such
as FSK, or AFSK over AM or FM radios. With current amateur techniques,

that's a limit of 2400 baud for AM or FM. The PSK scheme used in 9600 baud modems would fit the bandwidth using SSB radios, and MSK would permit 16.6 kilobaud. No presently used amateur technique can squeeze 19.6 kilobaud into 20 kHz.

NOTE: For the more complex modulations, baud != bps. You can encode more than one bit with a single baud, thus achieving higher effective bps transfers. 38.4 kbps should be possible with amateur grade techniques. Compression techniques should increase that even further.

Gary
--
Gary Coffman KE4ZV | Where my job's going, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | I don't know. It might | uunet!rsiatl!ke4zv!gary
534 Shannon Way | wind up in Mexico. | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -NAFTA Blues |

826. Re: Max BAUD on 6M AM & FM

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-22 19:53:34 UTC
From: CSLE87@maccvm.corp.mot.com
Message-ID: <1993Nov22.200120.12864@schbbs.mot.com>
Source record: 51116

JOE - I have also posted Gary with a correction that is critical here.
Please remeber to include also the restrictions in par 2 which limit
the allowed bandwidth. "No non-phone emission shall exceed the bandwidth
of a communications quality phone emission of the same modulation type."
Thus if using SSB, the max BW is 3 kHz period. The maximum signal BW on
FM would be 16 kHz, both by the FCC's own definitions. Be careful!!
------------------------ Original Article ------------------------
From: jbloom@arrl.org (Jon Bloom, KE3Z)
Newsgroups: rec.radio.amateur.digital.misc
Subject: Re: Max BAUD on 6M AM & FM
Message-ID: <2635@arrl.org>
Date: 22 Nov 93 10:14:13 EST
Organization: American Radio Relay League
Lines: 52

In rec.radio.amateur.digital.misc, gary@ke4zv.atl.ga.us (Gary Coffman) writes:
>In article <CGt9JM.5v9@fms.com> andrews@fms.com (Andrew Sargent N8OFS) writes:
>>
>>I thought this question could easily be answerd by Pt 97, WRONG!
>>
>>I need to know, what is the maximum baud rate (AX.37 packet) using
>>either AM _or_ FM on 6 meters???
>
>Here's what Part 97 has to say about data transmission on 6 meters.
>
>#quote
>
>97.307f(5)
>A RTTY, data or multiplexed emission using a specified digital code
>listed in 97.309(a) of this Part may be transmitted. The symbol rate
>must not exceed 19.6 kilobauds. A RTTY, data or multiplexed emission
>using an unspecified emission using an unspecified digital code under
^^^^^^^^^^^^^^^^^^^^^^^^^^^^^ strike that; it isn't in the rule
>the limitations listed in 97.309(b) of this Part also may be transmitted.
>The authorized bandwidth is 20 kHz.
>
>#end quote
>
>So you're limited to 19.6 kb *and* a maximum bandwidth of 20 kHz.

Ah, no. What the rule says is that when you are using a specified
digital code from 97.309(a), you can send at up to 19.6 kbauds. When
you are using "any digital code" you can send within a 20-kHz bandwidth.
The first two sentences go together; the last two sentences go together.
(This was a lot more obvious before the latest rules rewrite. Old

part 97.69 contained each set of code and signaling restrictions together in a common subparagraph.)

Now, I realize that this set of rules doesn't make much sense. To understand why it is the way it is, you have to remember a bit of history of the rules. Before the present rules, you could send only authorized codes,and only via FSK or AFSK. Addition of the authorization to send "any digital code" and using a variety of modulation techniques above HF was sort of grafted onto the existing rules. The result is a bit, well, uneven.

Why hasn't it been changed? Because it hasn't proven to be a problem. When and if it becomes a problem, likely it *will* be changed.

Bottom line: if your packet system on 6 meters is sending only the codes of 97.309(a) (e.g., ASCII), you can run at up to 19.6 kbauds. If you're sending data that doesn't fall within 97.309(a), you have to do so within a 20-kHz bandwidth.

Jon Bloom, KE3Z | jbloom@arrl.org
American Radio Relay League |
225 Main St., Newington CT 06111 |

827. Re: Max BAUD on 6M AM & FM

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-22 20:03:03 UTC
From: CSLE87@maccvm.corp.mot.com
Message-ID: <1993Nov22.201141.13088@schbbs.mot.com>
Source record: 51117

The question being answered is not a valid question, since there are
additional FCC restrictions on the bandwidth. Please check 97.307 f 2
before going further down the path. The FCC limits you to not more than
the bandwidth required for a communications quality voice signal, which
on FM is 16 kHz, and since you can't exceed that, the reference to 20 kH
is meaningless (and very confusing, too!).
------------------------ Original Article ------------------------
Newsgroups: rec.radio.amateur.digital.misc
From: gary@ke4zv.atl.ga.us (Gary Coffman)
Subject: Re: Max BAUD on 6M AM & FM
Message-ID: <1993Nov22.150859.22728@ke4zv.atl.ga.us>
Reply-To: gary@ke4zv.atl.ga.us (Gary Coffman)
Organization: Destructive Testing Systems
References: <CGt9JM.5v9@fms.com> <1993Nov21.135728.17393@ke4zv.atl.ga.us> <arog.
Date: Mon, 22 Nov 1993 15:08:59 GMT
Lines: 51

In article <arog.753911447@BIX.com> arog@BIX.com (arog on BIX) writes:
>gary@ke4zv.atl.ga.us (Gary Coffman) writes:
>[stuff cut]
>>97.307f(5)
>>A RTTY, data or multiplexed emission using a specified digital code
>>listed in 97.309(a) of this Part may be transmitted. The symbol rate
>>must not exceed 19.6 kilobauds. A RTTY, data or multiplexed emission
>>using an unspecified emission using an unspecified digital code under
>>the limitations listed in 97.309(b) of this Part also may be transmitted.
>>The authorized bandwidth is 20 kHz.

>[more stuff cut to end]

>Taken another way, by the rule.of.thumb that the sum of
>twice the deveation plus twice the highest modulating freq
>is the occupied bandwidth, five kc dev in a twenty kc
>channel allows the highest significant modulation to
>be six kc for FM. For AM, its just twice the modulating
>freq, of course.
>
>Now, how high a bps rate can be fit in six kc ?

That's a tough question. MSK gives us the smallest bandwidth
per baud at 1.2 Hz per baud. Obviously direct MSK is preferred
to modulating an FM voice band radio. However, we can do a few
tricks. First we could use a 5 kb MSK audio signal as our baseband
modulation, but that would run into nasty aliasing problems. Or
we could take an alternate approach of using multiple low baud

carriers in parallel in the voice bandwidth. That's the approach
taken by Telebit in their PEP modems. They can transfer 512 bits
in parallel for each clock tick. However, that requires DSP filtering
to deal with the overlapping carriers.

But the issue is bps, not baud. Since we know we can encode several
bits in one baud by using approaches like QAM, we know we can transfer
more than 5 kbps of data in a 5 kb channel. Depending on the S/N ratio
we have to play with, I'd guess we could get an effective throughput of
at least 38.4 kbps in a voice grade channel since phone modems can do
this using n-way encoding and on-the-fly compression. Whether that's
practical on our radio circuits depends on the amount of training
time we can tolerate in each exchange. Certainly for n-way packet
connections, the training time would be a killer. But for dedicated
duplex links we could probably match phone line modem performance
in a voice bandwidth.

Gary
--
Gary Coffman KE4ZV | Where my job's going, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | I don't know. It might | uunet!rsiatl!ke4zv!gary
534 Shannon Way | wind up in Mexico. | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -NAFTA Blues |

828. Re: Any experience from delta modulation??

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-22 21:03:21 UTC
From: jmaca
Message-ID: <1993Nov22.210321.6195@aio.jsc.nasa.gov>
Source record: 51112

NASA uses delta modulation on the shuttle... it runs at 24 or 32 kbps...
It sounds reasonable well (as you've probably heard)... It is also very
forgiving to noise and bit errors. If you have a good link or FEC, I would
suspect that other forms of encoding are better suited to ham radio.
Possibly something like they use in the STU-III secure telephone units.
I think this is Linear Predictive Coding or something like that... Those units
operate as low as 300 bps but sound much better at 2400 bps or higher.

In article <1993Sep22.224319.8415@krk.fi> lakki@krk.fi (Erik Finskas) writes:
>
>Have anyone tried delta modulation for digital communication?? Motorola
>has a codec for Slope delta modulation, which can handle low bit rates,
>and is especially designed for them.
>All e-mail appreciated.
>
>/Erik
>--
>E R I K F I N S K A S OH2LAK
>----------------------------------- R A
>InterNet: Erik.Finskas@krk.fi RADIO AMATEUR
> Lakki@krk.fi D HAM A
> Lakki@cute.cute.fi I T RADIO
>Amateur Packet: OH2LAK@OH2RBJ.FIN.EU O E I
>----------------------------------- U O
> H A M R A D I O R
> T H E R E A L T H I N G

829. wb7tpy gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-22 22:31:46 UTC
From: jangus@skyld.tele.com
Message-ID: <753983779snx@skyld.tele.com>
Source record: 51114

In article <2cjnvhINNlfa@network.ucsd.edu> brian@nothing.ucsd.edu writes:

>
> Is there really anyone in the world who doesn't know that the USA is
> on the continent of North America? Then why is the .NA required?

Just ask anyone in the teaching profession. Apparently most people under the age of 30 these days have a hard time locating North America on a map.

The .NA is "required" beecause people think it is required. Another effect of amateurs copying something they didn't take the time to fully understand before they did it.

Cheers

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "It is difficult to imagine our
Internet: jangus@skyld.tele.com | universe run by a single omni-
US Mail: PO Box 4425 Carson, CA 90749 | potent god. I see it more as a
Phone: 1 (310) 324-6080 | badly run corporation."

830. Re: wb7tpy gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-22 22:50:37 UTC
From: hrcsup@cc.bellcore.com
Message-ID: <hrcsup.3.0011D87B@cc.bellcore.com>
Source record: 51118

In article <mV0DDc5w165w@nj8j.atl.ga.us> ben@nj8j.atl.ga.us (Ben Coleman) writes:
>burke_br@adcae1.comm.mot.com (WB4YUC) writes:

>> First, .na on packet, worldwide, stands for "North America." the
>> gateway operator has NO control over this.

>Of course, there is an alternate system, which uses 4-character, rather
>than 2-charter, 'continent' addresses. It was devised by some sysops who
>found that the two-character system was inadequate and that a further
>breakdown of 'continents' would ease routings. In practice, both are
>used, and sysops pretty well have to set up for both when setting up
>routing tables(at least I did when I sysoped W8SP/PBBS).

The entire 4-character system was first proposed by Tom Clark, W3IWI, in 1990
in a paper in the proceedings of the 9th ARRL/CRRL Computer Networking
Conference in London, Ontario. In this paper, Tom called for the elimination
of continental designators; that systems simply route on the ISO-3166
ALPHA-3 code. This system was presented as a fallback position should there
be a truly good reason to even have continental designators, at all. To date,
the "best" reason I have heard is that some HF forwarding stations refuse to
handle messages without the 2-character designators:-(. Through the 11th
Conference (last proceedings I have in hand) with the exception of the one
paper at the 7th Conference that first detailed hierarchical routing (or naming
as the case may be) any paper that has expressed a view on continental
designators has supported their elimination (including my own).

>Personally, with the legal problems with Inet->packet and packet->Inet
>gatewaying, I think the better compromise would be to go with the
>4-character designators, as I'm not sure we want to make the packet
>network look like 'just another part' of the Internet. I'd rather keep
>emailers aware that because of legal requirements, they have to
>deliberately send email to the gateway.

Trimming the PBBS system names to end with the ISO-3166 ALPHA-3 codes I feel
is an even better compromise than the 4-character designators as they convey
the required information and are clearly distinct from the ISO-3166 ALPHA-2
codes used on the internet and are non-intersecting with the existing
3-character top level domains.

>Ben

>+---------------------------------------+---------------------------------+
>| Ben Coleman NJ8J | "All that is not eternal is |
>| AX.25: NJ8J@W4QO.#EAL.#ATL.GA.USA.NA | eternally out of date." |
>| Internet: ben@nj8j.atl.ga.us | C. S. Lewis |
>+---------------------------------------+---------------------------------+

Frank

Frank Warren, Jr. KB4CYC
Internet: hrcsup@cc.bellcore.com (business related) or
fwar1@cc.bellcore.com (radio related to fwar1 please)
AX.25 : kb4cyc@kb4cyc.nj.usa

831. Re: Max BAUD on 6M AM & FM

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-23 00:25:10 UTC
From: brian@nothing.ucsd.edu
Message-ID: <2crl96INNodo@network.ucsd.edu>
Source record: 51119

The California Intercity Trunk uses 4800 baud FSK on 6 meters. We use 4800 bps because the filters in the Mocom-70s that were the original equipment on the system wouldn't accomodate 9600 baud FSK at an acceptable bit error rate.

Newer single-conversion radios with more modern filters might, and some experimentation with this is probably appropriate.

I think it would be reasonable to request an STA to allow 56kb or higher data rates experimentally on 6 meters. It think it might work well, especially around here, as it's the only amateur band below microwave that has space and lacks radar interference.
- Brian

832. Re: wb7tpy gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-23 00:32:20 UTC
From: brian@nothing.ucsd.edu
Message-ID: <2crlmkINNoh8@network.ucsd.edu>
Source record: 51120

I would grit my teeth heavily and loudly, but

wb6cyt@wb6cyt.#soca.ca.usa.na.ampr.org

would be acceptable and would work when addresses were gatewayed from
the BBS 'world' to the real internet.

Clear, unambiguous, and legal. Arrgh!
- Brian

833. Packet Radio from Mexico

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-23 02:10:23 UTC
From: invitado@speedy.coacade.uv.mx
Message-ID: <invitado.6.2CF1710F@speedy.coacade.uv.mx>
Source record: 51121

Hi boys. I want to be a packet ham. I am at Xalapa, Veracruz, approximately 400 miles south of McAllen TX. My need is for a connection by the HF frecuencies, but i need to know first: Is it possible to get a connection in HF within the 400 miles range?? and, if possible, what equipment i should have? I am a long time user of the ka9q NOS system. If you have a solution for this in packet satellite please let me know.

Best Wishes,
Roman

Roman Torres
Programmer
Tazz BBS (WG7J 1.10x9 with a TIP Server!!)
(Mex)(28)12-21-84 , 1200 bauds.
rtorres@tazz.coacade.uv.mx
invitado@speedy.coacade.uv.mx

834. Packet ftp -- how slow?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-23 02:45:24 UTC
From: gganderson@augustana.edu
Message-ID: <gganderson.146.0@augustana.edu>
Source record: 51122

I am trying to interest my brother, who is big on computers
and tcp/ip things, to get interested in ham packet radio and
tcp/ip on that (he currently does not have a license). I
am also interested in possibly getting into packet after
I upgrade my license. As such I have several questions on
ham radio packet:

My first question is this -- how long does it take, given 2m
1200 baud technology that we have, to gateway to
internet and effect a ftp transfer from an anonymous
ftp server, like ucsd.edu, and bring back a 50k, 100k,
or 300kbyte file to one's PC computer at home?

Second question -- can one effectively telnet to any
packet node or internet computer with services as we
have them? And if so, how slow is 1200 baud packet at
that operation?

A third question -- Without installing a full NOS system,
can one get just a ham packet driver that would work with
programs like NCSA Telnet and Ftp for Macs and PCs?

I am used to Internet here at work, which allows me to
ftp regularly at 1/2 to 3kbyte/sec rates, so I need a
basis of comparison. I am currently not into packet,
but could very well be interested.

Thank you. 73 de Kevin Anderson, KB9IUA
* *
Kevin L. Anderson, Geography Dept., Augustana College
Rock Island, Illinois 61201 USA phone: (309) 794-7325
e-mail: gganderson@augustana.edu or kla@helios.augustana.edu
* *

835. USA and NA

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-23 03:58:55 UTC
From: pmarsh@metro.mccneb.EDU
Message-ID: <9311230358.AA27048@metro.mccneb.edu>
Source record: 51123

> Is there really anyone in the world who doesn't know that the USA
> is on the continent of North America? Then why is the .NA
> required? Stupid software?
> - Brian

My guess would be that many folks in the Union of South Africa (USA) would have a bit of difficulty believing that the USA is on the continent of North America. Tectonic Plates moving a bit faster than expected?

Paul Marsh Omaha NE.USA.NA N0ZAU

836. Re: wb7tpy gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-23 05:57:37 UTC
From: david@stat.com
Message-ID: <qeegDc2w165w@stat.com>
Source record: 51124

brian@nothing.ucsd.edu (Brian Kantor) writes:

> I would grit my teeth heavily and loudly, but
>
> wb6cyt@wb6cyt.#soca.ca.usa.na.ampr.org
>
> would be acceptable and would work when addresses were gatewayed from
> the BBS 'world' to the real internet.

Hey, I suggested the same thing on our local tcp/ip mailing list. This discussion has been going hot and heavy on the local LAN in Arizona and New Mexico.

I wish that the subject line would change and drop the "wb7tpy gateway" ... I'm starting to feel guilty!

david wb7tpy

Editor, HICNet Medical Newsletter
Internet: david@stat.com FAX: +1 (602) 451-6135
Bitnet : ATW1H@ASUACAD

837. Re: Max BAUD on 6M AM & FM

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-23 06:35:14 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1993Nov23.063514.26957@ke4zv.atl.ga.us>
Source record: 51127

In article <1993Nov22.195314.12715@schbbs.mot.com> CSLE87@maccvm.corp.mot.com (Karl Beckman) writes:
>GARY - You did great until you stopped quoting the rules and started
>suggesting alternate modes. According to my 1990 rules, you still cannot
>occupy more bandwidth than a communications quality signal USING THE
>SAME EMISSION MODE. Check restriction 2 - it also applies on 6M!
>Thus SSB would be limited to 3 kHz bandwidth, and you won't squeeze 9600
>through that small a window on SSB. Your comment on PSK similarly would
>require the bandwidth to not exceed that of a voice signal using phase
>modulation, and since the FCC regards FM and PM as having the same
>width you are OK. Sorry for the correction, but apply ALL the rules! KB

Sorry, you're reading the table incorrectly. Footnote 2 is clearly and consistently applied in the table in 97.305c only to MCW, phone, and image emissions. Footnotes 5 and 8 apply to RTTY, data and test on 6 and 2 meters. Note that footnotes 3 and 4 are applied to data on HF bands, and 6 is applied instead at 1.25 meters and at 70 cm, which allows 56 kb or 100 kHz emissions. Footnote 2 is also present on all bands below 70 cm, but again applying only to MCW, phone, and image. On 33 cm and above footnote 7 is applied instead to *all* emission types which allows emissions that occupy the entire band. The practical effect of footnote 2 is to prohibit FSTV on the bands below 70 cm since it applies to image transmissions. It has no effect on data transmissions which are covered in different footnotes.

If you think for a moment, and consult the ITU emission designators that the FCC abides by, but calls by plain English names in 97.307, you'll discover that sending PSK through a SSB radio is *not* J3E emission, it's J2D emission, and has a different bandwidth limitation, in this case 20 kHz, than phone emissions.

Gary
--
Gary Coffman KE4ZV | Where my job's going, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | I don't know. It might | uunet!rsiatl!ke4zv!gary
534 Shannon Way | wind up in Mexico. | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -NAFTA Blues |

838. Re: Max BAUD on 6M AM & FM

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-23 06:53:01 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1993Nov23.065301.27223@ke4zv.atl.ga.us>
Source record: 51129

In article <2635@arrl.org> jbloom@arrl.org (Jon Bloom, KE3Z) writes:
>In rec.radio.amateur.digital.misc, gary@ke4zv.atl.ga.us (Gary Coffman) writes:
>>So you're limited to 19.6 kb *and* a maximum bandwidth of 20 kHz.
>
>Ah, no. What the rule says is that when you are using a specified
>digital code from 97.309(a), you can send at up to 19.6 kbauds. When
>you are using "any digital code" you can send within a 20-kHz bandwidth.
>The first two sentences go together; the last two sentences go together.
>(This was a lot more obvious before the latest rules rewrite. Old
>part 97.69 contained each set of code and signaling restrictions together
>in a common subparagraph.)
>
>Now, I realize that this set of rules doesn't make much sense. To
>understand why it is the way it is, you have to remember a bit of history
>of the rules. Before the present rules, you could send only authorized
>codes,and only via FSK or AFSK. Addition of the authorization to send
>"any digital code" and using a variety of modulation techniques above HF
>was sort of grafted onto the existing rules. The result is a bit, well,
>uneven.

When we queried the FCC about our 56 kb modem, they told us that
both the 56 kb and 100 kHz limitations applied on 1.25m and 70cm.
Apparently they read the regulation the way I do.

>Bottom line: if your packet system on 6 meters is sending only the
>codes of 97.309(a) (e.g., ASCII), you can run at up to 19.6 kbauds.
>If you're sending data that doesn't fall within 97.309(a), you have
>to do so within a 20-kHz bandwidth.

Packet does not use any of the specified codes in 97.309a. It's specified
in the AX25 standards document, accepted by the FCC, as transmitting *octets*
of synchronous data. As such, it always falls under the any other digital
code provisions. Whether ASCII characters are *embedded* into some of the
octets or not is irrelevant.

Gary
--
Gary Coffman KE4ZV | Where my job's going, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | I don't know. It might | uunet!rsiatl!ke4zv!gary
534 Shannon Way | wind up in Mexico. | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -NAFTA Blues |

839. Re: wb7tpy gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-23 06:58:13 UTC
From: enge@enge.almaden.ibm.com
Message-ID: <2csca5$h9t@juniper.almaden.ibm.com>
Source record: 51126

In article <2crlmkINNoh8@network.ucsd.edu>,
Brian Kantor <brian@nothing.ucsd.edu> wrote:
>I would grit my teeth heavily and loudly, but
>
> wb6cyt@wb6cyt.#soca.ca.usa.na.ampr.org
>
>would be acceptable and would work when addresses were gatewayed from
>the BBS 'world' to the real internet.
>
>Clear, unambiguous, and legal. Arrgh!
> - Brian

I realize the DNS purists will hate it but it certainly does make sense.
Lets do it!!!!

Roy Engehausen, AA4RE
enge@almaden.ibm.com

840. Help

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-23 08:22:49 UTC
From: nld@uipmzb.PHysik.uni-mainz.DE
Message-ID: <9311230822.AA16026@uipmzb.physik.uni-mainz.de>
Source record: 51130

```
help
```

841. Re: wb7tpy gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-23 08:58:06 UTC
From: jmagee@nyx10.cs.du.edu
Message-ID: <1993Nov23.085806.17098@mnemosyne.cs.du.edu>
Source record: 51128

I think that there is no need to change the adresses used on the PBBS network. The problem is
people using gateways to send mail from PBBS to internet and vice versa. The solution would be to close the gateways (that is the PBBS mail to Internet mail, after all not all amateurs
can legaly use them eg those in the UK,we are not alowed to send message from/to people who are not hams) and it would require less work than changing the PBBS addresses world wide. The only use of the internet in ham radio should be to connect ham stations via worm holes ie
only hams can use it.

If some one wants to mail some on on Internet, they should get an internet connection.
If some one wants to send a message via hte ham PBBS system they should get a licence and the
gear need for packet radio.

Jonathan u9229728@athmail1.causeway.qub.ac.uk
Ham AX25 GI7KMC@GB7TED.#63.GBR.EU

842. Re: Packet ftp -- how slow?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-23 12:05:59 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1993Nov23.120559.29795@ke4zv.atl.ga.us>
Source record: 51134

In article <gganderson.146.0@augustana.edu> gganderson@augustana.edu (Kevin Anderson
-7325) writes:
>I am trying to interest my brother, who is big on computers
>and tcp/ip things, to get interested in ham packet radio and
>tcp/ip on that (he currently does not have a license). I
>am also interested in possibly getting into packet after
>I upgrade my license. As such I have several questions on
>ham radio packet:
>
>My first question is this -- how long does it take, given 2m
>1200 baud technology that we have, to gateway to
>internet and effect a ftp transfer from an anonymous
>ftp server, like ucsd.edu, and bring back a 50k, 100k,
>or 300kbyte file to one's PC computer at home?

Only a few days. :-(

Effective throughput past the first relay is below 300 bps,
after the fourth relay it drops to practically nil. Unless
you have a direct connection to the gateway, it'll be an
exercise in frustration.

>Second question -- can one effectively telnet to any
>packet node or internet computer with services as we
>have them? And if so, how slow is 1200 baud packet at
>that operation?

See above.

>A third question -- Without installing a full NOS system,
>can one get just a ham packet driver that would work with
>programs like NCSA Telnet and Ftp for Macs and PCs?
>
>I am used to Internet here at work, which allows me to
>ftp regularly at 1/2 to 3kbyte/sec rates, so I need a
>basis of comparison. I am currently not into packet,
>but could very well be interested.

1200 baud sucks rocks for interactive work through relay nodes,
and it's practically useless for large file transfers. It's mainly
a slow Email delivery system. However, all is not lost. If you use
the 56 kb packet network, you can get ftp rates of 3-5 kbs. And
telneting is useful, even for interactive applications like text
editing through at least a couple of relay nodes. 9600 baud is useful
for interactive work if no more than one relay node intervenes. If the
relay is full duplex, performance will be much better.

My advice is that if 1200 baud packet is all that's available in
your area, don't bother unless you want to be the technology driver
that upgrades the network to a more reasonable speed, or all you
want is Email service.

Gary
--
Gary Coffman KE4ZV | Where my job's going, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | I don't know. It might | uunet!rsiatl!ke4zv!gary
534 Shannon Way | wind up in Mexico. | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -NAFTA Blues |

843. Routing on PBBS systems (Re: wb7tpy gateway)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-23 12:30:26 UTC
From: kenji@k2r.or.jp
Message-ID: <KENJI.93Nov23213026@reseau.k2r.or.jp>
Source record: 51133

In article <ceeeDc7w165w@nj8j.atl.ga.us> ben@nj8j.atl.ga.us (Ben Coleman) writes:
|kenji@k2r.or.jp (Kenji Rikitake) writes:
|> Including routing information into mail address will not work and
|> should be abandoned immediately.

|What do you suggest we replace it with?

Let me qualify a bit further - I don't want regional routing
information in the address. Obtaining routing information by parsing
mail address is OK, but the hierarchy of the mail address should be
more like organizational or logical one.

About routing info management: I dunno whether this WORKS *sigh* for
all PBBSes, but periodical distribution of routing information with a
centralized management is the most possible way to choose, although
this sounds quite a drawback.

What we're doing on sending/receiving mail in prug.or.jp with radio
Internet is also a hierarchical model.

| The 'White Pages' system isn't
|stable enough or rigorous enough to provide an alternative database, not
|to mention that it doesn't allow for 'temporary' addresses(e.g. say I go
|back to WV for a visit for a month, and take my packet equipment with
|me. I post messages from a WV PBBS and expect to receive replies back to
|that PBBS. As the replies wing their way back to WV, some PBBS checks
|its database and says "Hey, NJ8J's home PBBS isn't W8SP, it's W4QO", and
|re-addresses the message. Grrrr.).

I doubt whether we could really manage the needs of "temporary
addresses," even on systems using distributed name resolvers like
current Internet.

|Personally, I don't think the amateur packet system has the bandwidth for
|an alternative at this time.

I agree.

|Tell me, what is the alternative we should be using, and how do you
|propose we migrate from the current system to the new system?

All I can say and I want to say is that the PBBS mailing address
should co-exist without confusion with Internet domain mailing
address. Adding one pseudo- or real domain name for "the PBBS network"
will solve this problem.

[I understand how difficult to migrate, but that's not the issue I
want to talk about, so I will not make comments on it.]

// Kenji
--
Kenji Rikitake <kenji@k2r.or.jp> <kenji@rcac.astem.or.jp> (More available!)
Persuade me you may, but I won't be persuaded. -- Aristophanes

844. Re: wb7tpy gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-23 12:35:59 UTC
From: kenji@k2r.or.jp
Message-ID: <KENJI.93Nov23213559@reseau.k2r.or.jp>
Source record: 51131

In article <2crlmkINNoh8@network.ucsd.edu> brian@nothing.ucsd.edu (Brian Kantor) writes:
|I would grit my teeth heavily and loudly, but
|
| wb6cyt@wb6cyt.#soca.ca.usa.na.ampr.org
|
|would be acceptable and would work when addresses were gatewayed from
|the BBS 'world' to the real internet.

A good alternative. :)

|Clear, unambiguous, and legal. Arrgh!

Ditto.

Lemme add one thing tho - some people running PBBS here in Japan do
not want themselves to be called a part of ampr.org or the
Tee-see-pee-eye-pee world. *sigh* And that makes the issue more
political than technical.

// Kenji

--
Kenji Rikitake <kenji@k2r.or.jp> <kenji@rcac.astem.or.jp> (More available!)
Persuade me you may, but I won't be persuaded. -- Aristophanes

845. Ham Radio - Internet gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-23 12:57:10 UTC
From: kenji@k2r.or.jp
Message-ID: <KENJI.93Nov23215710@reseau.k2r.or.jp>
Source record: 51132
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.policy

In article <1993Nov23.085806.17098@mnemosyne.cs.du.edu> jmagee@nyx10.cs.du.edu (Jonathan Magee) writes:
|If some one wants to mail some on on Internet, they should get an internet connection.
|If some one wants to send a message via hte ham PBBS system they should get a licence and the
|gear need for packet radio.

While this sounds completely legal, I would like to pose some questions:

* Non-licensee in the USA can operate ham radio equipments under
control of licensees. Why should not messages originated by
non-licensees through airwaves by equipments completely controlled by
ham radio licensees (at least in the USA)?

* Isn't ham radio license for promoting technological advance for
general public? If radio network is closed and cannot communicate with
others, what sort of service can ham radio community provide (IF ANY)
to the general public?

// Kenji

--
Kenji Rikitake <kenji@k2r.or.jp> <kenji@rcac.astem.or.jp> (More available!)
Persuade me you may, but I won't be persuaded. -- Aristophanes

846. RTTY Book List

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-23 14:09:15 UTC
From: jackson@longlast.cs.nyu.edu
Message-ID: <2ct5ib$9k4@slinky.cs.nyu.edu>
Source record: 51135

Good morning all,
Could someone please post/email a list of suggested readings on the status of RTTY continental/global networking of today? I am very interested in this topic and would like to read much more about it's capabilities and future.

Secondly, has anyone implemented PGP for Packet Mail, or would that fall under intentional encryption?

Thank you.

Steve

--
Steven Jackson New York University
Assistant to the Chair of Comp Sci Courant Inst. of Mathematical Sciences
jackson@cs.nyu.edu, jcksnste@acfcluster 251 Mercer St, Room 411,NY 10012

847. Re: Ham Radio - Internet gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-23 15:24:17 UTC
From: rcrw90@email.mot.com
Message-ID: <rcrw90-231193082417@node_13059.aieg.mot.com>
Source record: 51138

In article <KENJI.93Nov23215710@reseau.k2r.or.jp>, kenji@k2r.or.jp (Kenji Rikitake) wrote:

> In article <1993Nov23.085806.17098@mnemosyne.cs.du.edu> jmagee@nyx10.cs.du.edu (Jonathan Magee) writes:
> |If some one wants to mail some on on Internet, they should get an internet connection.
> |If some one wants to send a message via hte ham PBBS system they should get a licence and the
> |gear need for packet radio.
>
> While this sounds completely legal, I would like to pose some questions:
>
> * Non-licensee in the USA can operate ham radio equipments under
> control of licensees. Why should not messages originated by
> non-licensees through airwaves by equipments completely controlled by
> ham radio licensees (at least in the USA)?

In the US a packet message is "third party traffic" for the relaying stations no matter *who* originates it. If a ham originates the message then only the link from the first station to the BBS or relay is non "third party".

> * Isn't ham radio license for promoting technological advance for
> general public? If radio network is closed and cannot communicate with
> others, what sort of service can ham radio community provide (IF ANY)
> to the general public?

Up to a point you are correct. Ham radio should in no way replace the commercial "common carriers" such as the telephone system for example. At one time there was a lot of "phone patching" on HF and even 2M autopatch use which was aimed at getting around telephone toll charges. That is illegal and has caused citations, most autopatch operators have various safegaurds against this activity today.

On the other hand ham radio can well be used to supplement other services. Emergency response is one of the most obvious of these.

Personally I think we should be able to carry much of Netnews via ham radio for example (or at least FIDO!). As far as I know that is not done today.

There are Internet/PBBS gateways for E-mail though, although they tend to be somewhat awkward to use.

Another use I have seen is for a yacht in the South Pacific to submit an article via packet to a (nonprofit) club magazine in Ft. Lauderdale. Appeared to work very well and was much faster than the mail in that part of the world.

--
Mike Waters rcrw90@email.mot.com AA4MW@KC7Y.PHX.AZ.US.NA

BOBS BEST BENT WIRE SK

848. Re: wb7tpy gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-23 16:48:37 UTC
From: henke@scaly.ssc.gov
Message-ID: <HENKE.93Nov23104837@scaly.ssc.gov>
Source record: 51137

In article <1993Nov23.085806.17098@mnemosyne.cs.du.edu> jmagee@nyx10.cs.du.edu (Jonathan Magee) writes:

>The problem is people using gateways to send mail from PBBS to internet
>and vice versa. The solution would be to close the gateways...
>...it would require less work than changing the PBBS addresses world wide.

Why stop there? After all, if we got rid of packet entirely, we wouldn't have *any* of the problems people talk about here. The world was a much simpler place after all when we lived in caves and spent our leisure time throwing rocks at the moon.

For some of use though, it is worth it to solve minor technical hangups in the name of being able to communicate with a wider range of people, more quickly and reliably.

>The only use of the internet in ham radio should be to connect ham
>stations via worm holes ie only hams can use it.

"Let's see how we can use the internet for personal ends while ensuring we don't have to contribute anything to it." I am the internet, John, and I object to being used. I'll cooperate with you to make networking better for both of us, but if you refuse to carry my traffic I see no reason at all I should tolerate yours.

>If some one wants to mail some on on Internet, they should get an internet connection.
>If some one wants to send a message via hte ham PBBS system they should get a licence and the
>gear need for packet radio.

And, presumably, if someone wants to read what you write they should get a screen wider than eighty columns and a tolerance for very sloppy editing.

Not everyone has unlimited funds, or time, or access. For some people, some forms of commo ('net, packet, voice phone, whatever) are impractical or impossible. Surely it's a positive good if as many people as possible can communicate using gear and training they already have.

849. Wanted MFJ-1270B TNC

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-23 17:09:23 UTC
From: AALONZO@eagle.wesleyan.edu
Message-ID: <AALONZO.53.2CF243C3@eagle.wesleyan.edu>
Source record: 51136

I'm looking for a MFJ-1270B TNC. If you have one that you are not using,
EMAIL me with your asking price and I'll get back to you.

Thanks,
de N1LOB
Allen Alonzo

850. specs for packet-radio ?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-23 17:38:40 UTC
From: g14b@alf.zfn.uni-bremen.de
Message-ID: <2cthr0$2nol@alf.zfn.uni-bremen.de>
Source record: 51006

Hi folks.

I'm thinking about doing some packet-radio but I'm an absolute beginner in
all those radio things (I didn't even have a licence yet).
In another posting here I just read that you can't use a standart (hayes)
modem for packet. That raised my interest in the protocols used for
packet.
So can some kind soul point me to some documents that desribe these
protocols, i.e. how the bits are coded with different baud-rates used, in
which way the packets are constructed (or: what is ax25), in which way
the access control for the channel is implemented and all these things.
Can I ftp those docs somewhere?

(pls. reply, don't just follow-up!)

thanks for your help, Kai
--
"It consisted of a lot of twigs mashed up to a pulp and flattened out into
sheets and then held together with something that had previously held a cow
together." <Douglas Adams>
Uni: g14b@alf.zfn.uni-Bremen.de + Home: kaba@wintermute.north.de

851. Re: Packet antenna?????

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-23 18:17:27 UTC
From: g14b@alf.zfn.uni-bremen.de
Message-ID: <2ctk3n$11j0@alf.zfn.uni-bremen.de>
Source record: 51007

>>>What would a good 2m packet antenna
[...]
>>a yagi.

In article <1993Nov15.141900.18252@cc.gatech.edu>,
Harold C. Forbes <harold@cc.gatech.edu> wrote:

>While anything may work, directional antennas should not be
>your first choice, because they increase the hidden node
>problem. Use an omni antenna, unless there is no way to

Would the same problem arise if two stations connect using two directional
antennas? They only hear each other and no one else can hear them, right?

> harold
just curious, Kai
--
"It sounds like a whisper Don't you know" <Tracy Chapman>
Uni: g14b@alf.zfn.uni-Bremen.de + Home: kaba@wintermute.north.de
Snail: Kai Bartels + c/o Junknickl + Kohlmannstr. 1 + 28359 Bremen + FRG
(pgp key on request)

852. Re: Portable Packet Station with a HP 95LX ???

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-23 18:47:37 UTC
From: levine@mc.com
Message-ID: <2ctls9$s23@jericho.mc.com>
Source record: 51139

```
In article 20678@exu.ericsson.se, lmcifpl@LMC.Ericsson.SE (Fergal Purcell) writes:
-->
--> I reckon that this is the best place for the following query.
-->
--> I have a 512 kb HP 95LX (palmtop) and will soon become the owner of a
-->FT-530 HT. I'm curious about packet and am wondering if any one out there
-->has managed to connect these elements with a TNC (and ??) to creat a
-->portable packet station, for this is what I'd like to achieve.
-->
--> What TNC would be recommended? What software is required? What else would
-->I need? (And any other questions that a newbie should ask)
-->
--> My first preference would be for a TNC that is small (cigarette box size)
-->battery powered. Second preference would be something that could be carried
-->EASILY and set up in seconds in office/apartemnt etc. The memory requirements
-->of the software should be low (the 95LX is not powerhouse!).
-->
-->Thanks, 73 DE Fergal
-->
-->
-->Standard Disclaimer

I have the exact same setup with a KPC-3.

It is very small and runs off a 9v battery so you are totally
battery powered.

I use the standard built in COMM program in the HP95. The 100
would be nice because of the 80 column display, the 95 scrolls
sideways to see the other 40 cols though.

You will need the serial interface kit from HP. Educalc
sells it for $36 or so. The serial cable that came with
my 95 is NULL MODEM so it no worky with a TNC or modem.

You can probably build the cable if you can find the
sill little tiny 4 pin connector for the '95!
---
------------------------------------------------------------
|| // ||\\ //|| //\\ //\\
|| // || \\ // || // //
||// || \\ || // //
||\\ || || || \\ === \\ ===
|| \\ || // || \\ // \\ //
|| \\ || // || \\// \\//
------------------------------------------------------------FTAC
```

Bob Levine KD1GG 7J1AIS VK2GYN formerly KA1JFP
levine@mc.com <--Internet email Phone(508) 256-1300 x247
kd1gg@wa1phy.ma <--Packet Mail FAX(508) 256-3599
---

853. Re: Kenwood TS850 and TNC distortion

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-23 18:51:25 UTC
From: levine@mc.com
Message-ID: <2ctm3d$s23@jericho.mc.com>
Source record: 50990

In article 4zu@cbnewsm.cb.att.com, hellman@cbnewsm.cb.att.com (eric.s.hellman) writes:
-->Several recent postings complained about voice and digital distortion
-->when using the Kenwood ACC 2 connector. I posted the connections that
-->I used with my TS 440. Nov '93 QST contains a note from KC6NSE in
-->Hints and Kinks that deals with this problem for the TS 850. He says
-->that he cured the problem with his KAM by changing the internal KAM
-->jumper K5 to HI (from LO). This sets the audio output. Alternatively,
-->Kenwood has recommended adjusting the TS 850 trimmer VR18 untill
-->SSB distortion disappears. (This fix is also for the PK 232).
-->Hope this helps, Shel WA2UBK dara@physics.att.com
-->

There is a Kenwood Service Bulletin about this that I was
able to obtain. A SASE to me at 32 Queens View Road,
Marlboro MA 01752 will get you one. I cured the problem
by disconnecting the audio wire (red) from the PK232 to the
TS850 and using the FSK MODE (FSK OUT on PK232 to FSK IN on
TS850)

|| // ||\\ //|| //\\ //\\
|| // || \\ // || // //
|||// || \\ || // //
||\\ || || || \\ === \\ ===
|| \\ || // || \\ // \\ //
|| \\ || // || \\// \\//
--FTAC
Bob Levine KD1GG 7J1AIS VK2GYN formerly KA1JFP
levine@mc.com <--Internet email Phone(508) 256-1300 x247
kd1gg@wa1phy.ma <--Packet Mail FAX(508) 256-3599
----

854. Re: ATM on Amateur Radio?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-23 19:21:33 UTC
From: rick@cs.sunysb.edu
Message-ID: <2ctnrt$ocf@newsserv.cs.sunysb.edu>
Source record: 50991
Cross-posted to: comp.dcom.cell-relay,rec.radio.amateur.digital.misc

Mark Laubach (laubach@hpl.hp.com) wrote:
: A. Kelly Shaw (kshaw@s850.mwc.edu) wrote:
: : Hello,
: :
: : I am currently working on a presentation concerning implementing ATM on
: : the Amateur Radio Bands as an improvement on packet radio. If you can
: : point me in the right direction as to where I can find a discussion on this
: : topic, I would appreciate it. With the recent news from AT&T concerning
: : implementing ATM on T1 lines, it sounds like it may be possible to
: : implement ATM on a RF link.

: Somehow I get the "feeling" that granularity of size over which the
: collision detection, error detection, and retransmit mechanism
: operates should be the same as the granularity of the transmission
: unit you are sending over the air. So I'm real curious to hear how
: ATM will be an improvement over the existing packet radio system.
: Your intro implies that you are looking at ripping out X.25 and
: replacing it with ATM. Are you doing anything else?
: Mark (N3BMN)

You're confining yourself with how ATM might apply to
existing amateur packet. Bandwidth allocation similar
to ATM might make sense in a full duplex system where a
hub would have to decide how to split up its forward
channel bandwidth among the client nodes.

Rick Spanbauer, WB2CFV
State U of NY/Stony Brook

855. Re: Internet vs. PBBS namespaces (was Re: wb7tpy gateway)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-23 19:36:10 UTC
From: hanko@wv.mentorg.com
Message-ID: <2ctona$h25@wvhpadm1.mentorg.com>
Source record: 50992

```
In article <2cln6c$bfl@apple.com>, winter@apple.com (Patty Winter) writes:
|> In article <2cj7pk$r77@wvhpadm1.mentorg.com>,
|> Hank Oredson <Hank_Oredson@mentorg.com> wrote:
|> >In article <1993Nov18.193333.25662@ve6mgs.ampr.org>,
|> >mark@ve6mgs.ampr.org (Mark G. Salyzyn) writes:
|> >|> burke_br@adcae1.comm.mot.com (Bruce Burke Sp App) writes:
|> >|>
|> >|> >gate@wb7tpy.az.usa.na is only for the packet side.
|> >|>
|> >|> And why? it *should* be
|> >|> gate@wb7tpy.az.usa.noam
|> >|> so as to not completely break the ISO standards ...
|> >|> NA is for namibia
|> >|>
|> >|> Anyone operating a Gateway between Packet Radio and the Internet should be
|> >|> shot if they don't at least understand their use of the *.na suffix is a
|> >|> dangerous activity! The ignorance of the masses is NO excuse for a Gateway
|> >|> operator!
|> >
|> >These two network do NOT share the same namespace.
|> >It is up to the agent that gates messages between them to take
|> >care of all addressing issues when it moves messages from one
|> >network to the other.
|>
|> This isn't an address translation problem. The problem is that many
|> messages aren't getting to gateways in the first place because of
|> (very understandable) confusion between real Internet addresses
|> and PBBS addresses that look like Internet addresses but aren't.
|> It's all very fine for those of us who can immediately spot the
|> difference to say that people shouldn't confuse the two, but that's
|> unrealistic. As Mark notes, sysops have a remedy available that will
|> solve the problem.
|>
|>
|> >Bottom line: if messages sourced in the BBS network are somehow
|> >getting to Namibia, it happens because of broken gateway software.
|>
|> The message in question *wasn't* sourced in the PBBS network. It
|> was originated on the Internet, which appropriately tried to find
|> the designated (albeit nonexistent) site in Namibia.
|>
|>
|> >Whether the BBS network should use one standard or another is a
|> >different issue. I will certainly not take any "sides" here.
```

|> >As long as we use SOME standard, it matters not one whit which
|> >standard we use - so let's pick one, and use it.
|>
|> Because of the increasing interaction between the Internet and
|> the PBBS system, it matters a lot more than a whit. When people
|> see two sets of addresses that look nearly identical in format,
|> *they're going to mix them up occasionally.* Why shouldn't PBBS
|> sysops make a simple change (in this case, from NA to NOAM) that
|> can prevent the problem?

I do (use NOAM).
Many others do.
The majority does not.
Some translate (NOAM to NA, NA to NOAM, etc. you name it).

The problem is not the use of some particular designator,
it is one of education. Unless people KNOW what addresses
to use, they will use the wrong ones. "NA" has been in use
in the BBS network for about 7 years. Now we have to educate
internet users about internet addresses. No big deal - go to
it, get that educational material out there so everyone sees it.

Get it out into the packet network also.

What do we do if some packet user wishes to gateway a message
so someone in Namibia?

There are always addressing problems, in any network.

However, when some GATEWAY screws up, that needs to be fixed.
When some USER screws up, they need to be educated.

I have never seen any educational material ... never ... beyond
the initial attempt to standardize addresses ... many years ago.

So someone - please put together some explanation, and get it
distributed into the FAQ - both here and on the BBS network.

... Hank

|>
|> I know that N0ARY for one has already done this. I consider that
|> yet another example of Bob's desire to help his users, which includes
|> heading off common mistakes instead of just saying, "You should have
|> known better than to do that."
|>
|>
|> Patty
|>
|> --
|> ============================== Patty Winter ==============================
|> Apple contractor Internet: winter@apple.com
|> Sunnyvale, California AMPRNet: 44.4.4.50

```
|> "What about truth? What about reality?"
|> "What about the way the old ending tested in Canoga Park?"
|> ================================ N6BIS ================================
|>
```

--

Hank Oredson @ Mentor Graphics
Internet : hank_oredson@mentorg.com
Amateur Radio: W0RLI@W0RLI.OR.USA.NA

856. Re: wb7tpy gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-23 19:38:11 UTC
From: hanko@wv.mentorg.com
Message-ID: <2ctor3$h25@wvhpadm1.mentorg.com>
Source record: 50993

In article <2cmfh4$n3r@juniper.almaden.ibm.com>, enge@enge.almaden.ibm.com () writes:
|> In article <2cjnvhINNlfa@network.ucsd.edu>, Brian Kantor
|> <brian@nothing.ucsd.edu> wrote:
|> >Is there really anyone in the world who doesn't know that the USA is
|> >on the continent of North America? Then why is the .NA required?
|> >Stupid software?
|> > - Brian
|>
|> The original purpose of the continents was to make life easier for the
|> "average-Joe" SYSOP. One might route anything-to-Europe to a certain
|> station which save having to know every country code.
|>
|> Besides, it HI.USA.OC not .NA...
|>
|> I would like to see the '2 letter" continent codes go away and only use
|> the 4 letter ones. Lets either abandon one or the other.
|>
|> Roy Engehausen, AA4RE
|> enge@almaden.ibm.com
|>

Let's abandon the two letter ones right now today forthwith.

My distribution examples use NOAM as of version 16.6 ...

(Oh oh - done it again - Hank and Roy agreeing on something)

... Hank

--

Hank Oredson @ Mentor Graphics
Internet : hank_oredson@mentorg.com
Amateur Radio: W0RLI@W0RLI.OR.USA.NA

857. Re: wb7tpy gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-23 19:39:36 UTC
From: hanko@wv.mentorg.com
Message-ID: <2ctoto$h25@wvhpadm1.mentorg.com>
Source record: 50994

In article <KENJI.93Nov21190530@reseau.k2r.or.jp>, kenji@k2r.or.jp (Kenji Rikitake) writes:
|> In article <2cjnvhINNlfa@network.ucsd.edu> brian@nothing.ucsd.edu (Brian Kantor) writes:
|> |Is there really anyone in the world who doesn't know that the USA is
|> |on the continent of North America? Then why is the .NA required?
|> |Stupid software?
|>
|> Stupid people and software, maybe.
|>
|> Including routing information into mail address will not work and
|> should be abandoned immediately.
|>
|> // Kenji
|>
|>
|> --
|> Kenji Rikitake <kenji@k2r.or.jp> <kenji@rcac.astem.or.jp> (More available!)
|> Persuade me you may, but I won't be persuaded. -- Aristophanes

What routing information?

These are NOT routes we are talking about ...
they are locations ...

I think all the bbs authors understand that a location is
not a route, and address is not a route nor a location,
etc. etc.

... Hank

--

Hank Oredson @ Mentor Graphics
Internet : hank_oredson@mentorg.com
Amateur Radio: W0RLI@W0RLI.OR.USA.NA

858. Re: wb7tpy gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-23 19:42:50 UTC
From: hanko@wv.mentorg.com
Message-ID: <2ctp3q$h25@wvhpadm1.mentorg.com>
Source record: 50995

In article <2cp3dk$lls@unicorn.ccc.nottingham.ac.uk>, eeyimkn@unicorn.nott.ac.uk (M. Knell) writes:
|> In article <KENJI.93Nov21192404@reseau.k2r.or.jp> kenji@k2r.or.jp (Kenji Rikitake) writes:
|> > |NA is what it has been and is still expected to be for some time...
|> >
|> >Making NA to NA.MBLNET or something else will completely solve the problem.
|> Yes, but it'll add another layer to the amateur packet network, which
|> is completely pointless judging by the potential problems, which are
|> very small. Anyway, we'd need FBBNET, NNANET, ... :-)
|> The gateways don't put any part of the packet address onto the
|> Internet in any consequential part, so why worry? Just because NA
|> happens to correspond to a valid top level domain on the Internet
|> doesn't mean that the entire packet network should have to change.
|>
|> My ukp0.02 (tuppence!) on the 2 vs. 4 letter codes - I may be sticking
|> my neck out here, but nobody in Europe uses the 4-letter versions.
|> Everybody is @.eu, in fact I don't even know what the 4-letter version
|> is as I've never seen it in a mail header from Europe! The Middle East
|> seem to use .mdle, but that's the only extensive use of the 4-letter
|> codes that I can think of.
|> And for American BBSs using .USA rather than .USA.NA, well... maybe
|> everybody else should drop continent designators on the ground that
|> 'everybody knows that San Marino's in Europe, don't they?'.
|>
|> 73 Mike
|>
|> --
|> +- Mike Knell, University of Nottingham, UK -=- eeyimkn@unicorn.nott.ac.uk --+
>	--THIS SPACE TEMPORARILY BLANK--	AMPR: g7gpa@hobbes.g7gpa.ampr.org
>	(until I can think of a decent joke)	AX25: g7gpa@g7gpa.gb7bad.#23.gbr.eu
>	UNDER the overpass! OVER the underpass! Around the future and BEYOND REPAIR!

And that Namibia is in Africa and not in North America.
And is never addressed with one of those really stupid internet
TWO letter designations. At least we got one thing right in
the bbs network: we used the THREE letter country codes ...

And any reasonable router should be able to tell the difference
between USA.NA and something in Namibia - or does Namibia have
a USA sub-domain ?

... Hank

--

Hank Oredson @ Mentor Graphics
Internet : hank_oredson@mentorg.com
Amateur Radio: W0RLI@W0RLI.OR.USA.NA

859. Re: wb7tpy gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-23 19:50:49 UTC
From: hanko@wv.mentorg.com
Message-ID: <2ctpip$h25@wvhpadm1.mentorg.com>
Source record: 50996

In article <KENJI.93Nov22202944@reseau.k2r.or.jp>, kenji@k2r.or.jp (Kenji Rikitake) writes:
|> In article <2cp3dk$lls@unicorn.ccc.nottingham.ac.uk> eeyimkn@unicorn.nott.ac.uk (M. Knell) writes:
|> |The gateways don't put any part of the packet address onto the
|> |Internet in any consequential part, so why worry? Just because NA
|> |happens to correspond to a valid top level domain on the Internet
|> |doesn't mean that the entire packet network should have to change.
|>
|> It's not a matter of worrying - it has already become an annoyance to
|> some people who don't care anything about ham radio. I think ham radio
|> people should not bother others. Just because .NOAM happens NOT to
|> correspond to a valid Internet top domain does not mean that .NOAM
|> will be reserved in the Internet for PBBS systems - UNLESS the PBBS
|> network registers itself as a valid subdomain of the Internet.
|>
|> It was really unfortunate that the PBBS and Internet are using almost
|> the same naming syntax for hosts/objects. But I think it's up to ham
|> radio people whether to solve this problem or not - at least Internet
|> has an open door for the PBBS network to obtain a non-country domain
|> name (e.g. .org or .net).
|>
|> // Kenji
|> --
|> Kenji Rikitake <kenji@k2r.or.jp> <kenji@rcac.astem.or.jp> (More available!)
|> Persuade me you may, but I won't be persuaded. -- Aristophanes

If people would simply STOP trying to connect the two networks,
the problem would just go away.

Long ago, we beleived there were good sound reasons NOT to connect
the networks - legal and regulatory reasons.

Now folks want to connect them.

There is certainly no problem creating some new top level domain
for the bbs network - but why bother? We have one already: it
is ampr.org ... so what is the problem with using that at the gates?
Anything that came from the bbs net gets appended .ampr.org when it
moves to the internet. Same thing the other way: the .ampr.org gets
dropped once the traffic is inside that net.

Is there some problem with this concept?

Here at work I do not specify "mentorg.com" with all the local addresses,
it is simply assumed. If I were to attempt to send a message to someone

in the bbs network from here, it would go to (for example)
w0rli@w0rli.or.usa.noam.ampr.org - no big deal for any router to handle.

Oh yes, I know about the issues with tcp/ip - but tcp/ip within the bbs net is yet a different issue. One still needs the hierarchical location information, since many services do indeed use those identifiers as routing hints (ROUTING HINTS, not ROUTES ...) and we would like to continue to do so.

I always thought it was obvious that when we spoke of the "bbs network" we meant "ampr.org", and that the creators of gateways would do the right thing for traffic crossing network boundaries.

Naw ... this is all too simple.

... Hank

--

Hank Oredson @ Mentor Graphics
Internet : hank_oredson@mentorg.com
Amateur Radio: W0RLI@W0RLI.OR.USA.NA

860. Re: wb7tpy gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-23 19:56:49 UTC
From: hanko@wv.mentorg.com
Message-ID: <2ctpu1$h25@wvhpadm1.mentorg.com>
Source record: 50997

In article <2crlmkINNoh8@network.ucsd.edu>, brian@nothing.ucsd.edu (Brian Kantor) writes:
|> I would grit my teeth heavily and loudly, but
|>
|> wb6cyt@wb6cyt.#soca.ca.usa.na.ampr.org
|>
|> would be acceptable and would work when addresses were gatewayed from
|> the BBS 'world' to the real internet.
|>
|> Clear, unambiguous, and legal. Arrgh!
|> - Brian

And in fact is what the FQDN actually is in the bbs network, we just don't
usually add the top domain because it is only required at the gates ...

And yes, we DID think about all this long ago when the original VE3GYQ
(et all) paper was put together for DNC 7 ...

How do you pronounce the FLA for "Fully Qualified Domain Name" ?
I've always had a problem pronouncing it on the air ... heh heh ...

... Hank

--

Hank Oredson @ Mentor Graphics
Internet : hank_oredson@mentorg.com
Amateur Radio: W0RLI@W0RLI.OR.USA.NA

861. Re: USA and NA

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-23 19:57:46 UTC
From: hanko@wv.mentorg.com
Message-ID: <2ctpvq$h25@wvhpadm1.mentorg.com>
Source record: 50998

In article <9311230358.AA27048@metro.mccneb.edu>, pmarsh@metro.mccneb.EDU writes:
|>
|>
|>
|> > Is there really anyone in the world who doesn't know that the USA
|> > is on the continent of North America? Then why is the .NA
|> > required? Stupid software?
|> > - Brian
|>
|> My guess would be that many folks in the Union of South Africa (USA) would
|> have a bit of difficulty believing that the USA is on the continent of
|> North America. Tectonic Plates moving a bit faster than expected?
|>
|> Paul Marsh Omaha NE.USA.NA N0ZAU

Wrong abbreviation. It is ZAF of course.

Check your ISO tables.

... Hank

--

Hank Oredson @ Mentor Graphics
Internet : hank_oredson@mentorg.com
Amateur Radio: W0RLI@W0RLI.OR.USA.NA

862. Re: Max BAUD on 6M AM & FM

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-23 21:23:33 UTC
From: jbloom@arrl.org
Message-ID: <2644@arrl.org>
Source record: 51000

In rec.radio.amateur.digital.misc, gary@ke4zv.atl.ga.us (Gary Coffman) writes:
>In article <2635@arrl.org> jbloom@arrl.org (Jon Bloom, KE3Z) writes:
>>In rec.radio.amateur.digital.misc, gary@ke4zv.atl.ga.us (Gary Coffman) writes:
>>>So you're limited to 19.6 kb *and* a maximum bandwidth of 20 kHz.
>>
>>Ah, no. What the rule says is that when you are using a specified
>>digital code from 97.309(a), you can send at up to 19.6 kbauds. When
>>you are using "any digital code" you can send within a 20-kHz bandwidth.
>>The first two sentences go together; the last two sentences go together.
>>(This was a lot more obvious before the latest rules rewrite. Old
>>part 97.69 contained each set of code and signaling restrictions together
>>in a common subparagraph.)

>When we queried the FCC about our 56 kb modem, they told us that
>*both* the 56 kb and 100 kHz limitations applied on 1.25m and 70cm.
>Apparently they read the regulation the way I do.

Please email me the name and title of the FCC person who gave you that
information. That is *not* the interpretation we have gotten from PRB.
It also is not consistent with the previous rule, which was not stated
to have been changed in the last rewrite.

>Packet does not use any of the specified codes in 97.309a. It's specified
>in the AX25 standards document, accepted by the FCC, as transmitting *octets*
>of synchronous data. As such, it always falls under the any other digital
>code provisions. Whether ASCII characters are *embedded* into some of the
>octets or not is irrelevant.

No, a code is a mapping from a character set to a binary value. The FCC
is quite explicit about the allowed codes, citing them by their national
and international standard designators. And those standards are quite
explicit, too: they map the character set onto a set of binary values.
They say *nothing* about how the bits are sent. You can send ASCII code
via async (start and stop bits), synchronous (e.g., monosync or bisync),
or in HDLC frames (like AX.25 does); it's still ASCII. An "unspecified
digital code" is one that does not follow the mapping of the referenced
standards, regardless of what modem or synchronization standard is used
to transmit it.

And the AX.25 document says nothing about the coding of the data field
except that it must be an integer number of octets. You can send data
via packet using the Baudot code if you like--and you won't be using
an "unspecified digital code."

Jon Bloom, KE3Z | jbloom@arrl.org
American Radio Relay League |

225 Main St., Newington CT 06111 |

863. Re: wb7tpy gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-23 22:14:54 UTC
From: whitemp@cnsvax.uwec.edu
Message-ID: <1993Nov23.161454.11056@cnsvax.uwec.edu>
Source record: 50999

In article <1993Nov23.085806.17098@mnemosyne.cs.du.edu>, jmagee@nyx10.cs.du.edu (Jonathan Magee) writes:
> I think that there is no need to change the adresses used on the PBBS
> network. The problem is people using gateways to send mail from PBBS to
> internet and vice versa.
That is the cause of the problem - not the problem it self. The problem is that no one planned for such a thing (no big deal - many cities have interesting road systems for just this reason.)

> The solution would be to close the gateways (that
> is the PBBS mail to Internet mail, after all not all amateurs can legaly use
> them eg those in the UK,we are not alowed to send message from/to people who
> are not hams) and it would require less work than changing the PBBS
> addresses world wide.
Close 'em in the UK. OR see if that ruling can be changed. Remember folks, rules are not written in stone.

BTW, that assumes that you would have to change the PBBS addresses around the world. There are other solutions.

> The only use of the internet in ham radio should be
> to connect ham stations via worm holes ie only hams can use it.
What a strange limitation. Worm holes are fun. However, on a practical side, EMAIL gateways are better - as you need not be present to take advantage of communications. All sorts of tatical and message handling could take place via the internet. For instance, a 'Health and Welfare' message could be emailed to a ham via the inet, relayed via pbbses, and then delivered in some remote area - with little human help. You want to keep this from ever happening?

> If some one wants to mail some on on Internet, they should get an internet
> connection. If some one wants to send a message via hte ham PBBS system
> they should get a licence and the gear need for packet radio.
Let me guess, NYX gives you a quarter each time you suggest an idea like this?

If some one wants to mail some on in England, they should get a house in England. If some one wants to send a message via hte United States Post office they should get a house in the US.

Silly, no?
> Jonathan u9229728@athmail1.causeway.qub.ac.uk
> Ham AX25 GI7KMC@GB7TED.#63.GBR.EU
That info could be optimized...
-mw-
N9UXC
whitemp@cnsvax.uwec.edu

864. Re: wb7tpy gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-23 22:35:18 UTC
From: andyw@aspen32.cray.com
Message-ID: <1993Nov23.163518.13551@hemlock.cray.com>
Source record: 51001

In article <2ctp3q$h25@wvhpadm1.mentorg.com>, hanko@wv.mentorg.com (Hank Oredson) writes:
> [...]
> And that Namibia is in Africa and not in North America.
> And is never addressed with one of those really stupid internet
> TWO letter designations. At least we got one thing right in
> the bbs network: we used the THREE letter country codes ...

Err, the site that ended up with a pile of xxx.usa.na messages
was in Namibia, and it's official domain name *did* end in .na
Actually, since the guy had to pay for all those messages to
get delivered over a long distance UUCP connection, and then
pay again while they bounced (until he at least stopped that),
I thought he was more than reasonable about the whole affair..

> And any reasonable router should be able to tell the difference
> between USA.NA and something in Namibia - or does Namibia have
> a USA sub-domain ?

And here we have it, the "left to right" parsing thinking that
brought you the # fields in PBBS addresses. If someone wants
to call a domain in Namibia "usa" then they are entitled to.

Sigh..
--
andyw N0REN/G1XRL

andyw@aspen.cray.com Andy Warner, Cray Research, Inc. (612) 683-5835

865. mac840av and packet

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-24 02:52:17 UTC
From: arp0150@ritvax.isc.rit.edu
Message-ID: <1993Nov24.025217.15792@ultb.isc.rit.edu>
Source record: 51002

hi all... here a odd question for you... i just ordered a mac 840av. On the his mac there is at&t's 3210 dps chip(66mhz).It is used for things like a v32bis modem at speeds up to 9600(this option is called the GeoPort). I was wondering if you all thought it would be pospable to make the software to turn the GeoPort into a TNC.. from my understanding the port device is only a few components.. every thing else is software based...
this looks very very intresting.

Oh well thanks in advance for all your input.

alex

internet -> arp0150@ritvax.isc.rit.edu

866. FT-530 glitch

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-24 06:05:17 UTC
From: "Seth M. Dworken" <p00123@psilink.com>
Message-ID: <2963195789.2.p00123@psilink.com>
Source record: 51003

Greetings. I have an FT-530 HT and really like it a lot. A friend just got one and we are going to set up DTMF paging, with the auto-acknowledgement feature.

I ran into a problem enabling "auto page acknowledgement". When entering "F/set/9" it displays PA OFF and will not toggle to PA ON. This does work on my friend's unit.

Any ideas on what might be wrong? My unit is about 6 or 7 months old. My friend's is new. I am not aware of any other programming option that would interfere with this, but if anyone knows of one, please let me know. The only other thing I can think of is that there might be old firmware in it.

Maybe anyone out there that has one could try it and let me know whether they can turn this on or not.

Thanks for any help!

73, Seth

867. Packet ftp -- how slow?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-24 09:07:33 UTC
From: K.E.Walton@bradford.ac.uk
Message-ID: <1993Nov24.090733.11226@bradford.ac.uk>
Source record: 51004

Hi,

Just expressing some interest in the telnet (as mentioned in previous
mail) drivers, are any avaliable ?

Kevin
--
//// Computer Science Student Email : K.E.Walton@Bradford.AC.UK ////
//// Bradford University Snail Mail : 38 Fieldhead Street ////
//// England Bradford, West Yorks, ////
//// Call Sign : G7PMO ENGLAND, BD7 1LP ////

868. Please stop it!

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-24 14:06:50 UTC
From: nld@uipmzb.PHysik.uni-mainz.DE
Message-ID: <9311241406.AA22436@uipmzb.physik.uni-mainz.de>
Source record: 51005

Hi folks,
please, don't send the Ham-Radio Digest to this adress any more. That guy, who wanted it, left our house, and will never come back and no one here is interested in that stuff.
So, please, no further mailing!

Have a nice day
Jochen Diehl

869. Re: ATM on Amateur Radio?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-24 14:24:15 UTC
From: CSLE87@maccvm.corp.mot.com
Message-ID: <1993Nov24.143621.18688@schbbs.mot.com>
Source record: 51009

I think the major issue here is where you are going to find this
bandwidth not already occupied at least in part by amateurs on other
modes. The AT&T announcement was a greatly REDUCED bandwidth from the
normal tens of MB required for ATM. Right now the hams get upset when
a few kHz disappear, so don't expect a hero's welcome when you announce
that you need room for a 26 MB data stream to replace 1200 baud packet,
and therefore are taking over ALL of the 430-450 band (minus the NOAA
Doppler Radar window, of course!) for the first test system. Let's find
ways to work in narrower BWs, since the bands aren't growing in the same
fashion as cable or fiber bandwidths. It's sort of like telling Microsoft
that disks are shrinking, not growing, so Word 6 has to take 30% LESS on
the hard drive than the previous version. A terribly radical thought, do
more with less, like we've been hearing from business for several years
now.
------------------------ Original Article ------------------------
Xref: schbbs comp.dcom.cell-relay:2261 rec.radio.amateur.digital.misc:1130
From: rick@cs.sunysb.edu (Rick Spanbauer)
Subject: Re: ATM on Amateur Radio?
Date: 23 Nov 1993 19:21:33 GMT
Organization: State University of New York at Stony Brook
Lines: 28
References: <CGrL57.6Iq@usenet.ucs.indiana.edu> <1993Nov22.191806.11611@hplabsz.
NNTP-Posting-Host: sbrick.cs.sunysb.edu

Mark Laubach (laubach@hpl.hp.com) wrote:
: A. Kelly Shaw (kshaw@s850.mwc.edu) wrote:
: : Hello,
: :
: : I am currently working on a presentation concerning implementing ATM on
: : the Amateur Radio Bands as an improvement on packet radio. If you can
: : point me in the right direction as to where I can find a discussion on this
: : topic, I would appreciate it. With the recent news from AT&T concerning
: : implementing ATM on T1 lines, it sounds like it may be possible to
: : implement ATM on a RF link.

: Somehow I get the "feeling" that granularity of size over which the
: collision detection, error detection, and retransmit mechanism
: operates should be the same as the granularity of the transmission
: unit you are sending over the air. So I'm real curious to hear how
: ATM will be an improvement over the existing packet radio system.
: Your intro implies that you are looking at ripping out X.25 and
: replacing it with ATM. Are you doing anything else?
: Mark (N3BMN)

You're confining yourself with how ATM might apply to existing amateur packet. Bandwidth allocation similar to ATM might make sense in a full duplex system where a hub would have to decide how to split up its forward channel bandwidth among the client nodes.

Rick Spanbauer, WB2CFV
State U of NY/Stony Brook

870. Re: wb7tpy gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-24 14:37:46 UTC
From: CSLE87@maccvm.corp.mot.com
Message-ID: <1993Nov24.144257.18843@schbbs.mot.com>
Source record: 51010

Sorry, I just couldn't resist tweaking you, Hank. You may agree, and
your documentation starting with 16.6 may use only the four-letter
abbrevs, but you'd better also CHANGE YOUR SIG FILE!!
Keep up the good work on removing these address conflicts. Problems
like NAmibia will only give amateur radio a poor image and make it more
difficult to keep the Internet/Amateur links functioning. 73-WA8NVW

------------------------ Original Article ------------------------
From: hanko@wv.mentorg.com (Hank Oredson)
Newsgroups: rec.radio.amateur.digital.misc
Subject: Re: wb7tpy gateway
Date: 23 Nov 1993 19:38:11 GMT
Organization: Mentor Graphics, Wilsonville, Oregon, USA
Lines: 35
Message-ID: <2ctor3$h25@wvhpadm1.mentorg.com>
References: <KENJI.93Nov16200241@reseau.k2r.or.jp> <5TH7cc1w165w@nj8j.atl.ga.us>
Reply-To: Hank_Oredson@mentorg.com
NNTP-Posting-Host: hanko.mentorg.com

In article <2cmfh4$n3r@juniper.almaden.ibm.com>, enge@enge.almaden.ibm.com () wr
|> In article <2cjnvhINNlfa@network.ucsd.edu>, Brian Kantor
|> <brian@nothing.ucsd.edu> wrote:
|> >Is there really anyone in the world who doesn't know that the USA is
|> >on the continent of North America? Then why is the .NA required?
|> >Stupid software?
|> > - Brian
|>
|> The original purpose of the continents was to make life easier for the
|> "average-Joe" SYSOP. One might route anything-to-Europe to a certain
|> station which save having to know every country code.
|>
|> Besides, it HI.USA.OC not .NA...
|>
|> I would like to see the '2 letter" continent codes go away and only use
|> the 4 letter ones. Lets either abandon one or the other.
|>
|> Roy Engehausen, AA4RE
|> enge@almaden.ibm.com
|>

Let's abandon the two letter ones right now today forthwith.

My distribution examples use NOAM as of version 16.6 ...

(Oh oh - done it again - Hank and Roy agreeing on something)

... Hank

--

Hank Oredson @ Mentor Graphics
Internet : hank_oredson@mentorg.com
Amateur Radio: W0RLI@W0RLI.OR.USA.NA

871. Internet Gatewaying

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-24 16:12:26 UTC
From: ete@trac3000.ueci.COM
Message-ID: <199311241612.AA62895@trac3000.ueci.com>
Source record: 51008

As Ben Coleman wrote:
>Personally, with the legal problems with Inet->packet and packet->Inet
>gatewaying, I think the better compromise would be to go with the
>4-character designators, as I'm not sure we want to make the packet
>network look like 'just another part' of the Internet. I'd rather keep
>emailers aware that because of legal requirements, they have to
>deliberately send email to the gateway.
>
>Ben

What exactly are the legal requirements? Are they more rigorous than those
imposed on the NSFNet?

- Eliot

--
"Are my eyes really brown?" - Humphrey Bogart in _Casablanca_
Eliot Everingham - Raytheon Engineers and Constructors - ete@trac3000.ueci.com

872. Re: mac840av and packet

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-24 17:31:22 UTC
From: jvp@tools1.ee.iastate.edu
Message-ID: <jvp.754162282@tools1.ee.iastate.edu>
Source record: 51011

In <1993Nov24.025217.15792@ultb.isc.rit.edu> arp0150@ritvax.isc.rit.edu (PIEMAN) writes:

>hi all... here a odd question for you... i just ordered a mac 840av. On the his
>mac there is at&t's 3210 dps chip(66mhz).It is used for things like a v32bis
>modem at speeds up to 9600(this option is called the GeoPort). I was wondering
>if you all thought it would be pospable to make the software to turn the
>GeoPort into a TNC.. from my understanding the port device is only a few
>components.. every thing else is software based...
>this looks very very intresting.

In short, most definately YES! The only thing that has to be done is to
turn the audio tones into bits, and vice versa. The rest of the pieces
already exist (ie. SoftKiss and Savant).

+---+
| Jim Van Peursem - Ph.D. Student - Ham Radio -> KE0PH |
| Department of Electrical Engineering and Computer Engineering |
| Iowa State University - Ames, IA 50011 |
| internet - jvp@iastate.edu -or- jvp@cpre1.ee.iastate.edu |
+---+

873. Re: wb7tpy gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-24 18:16:56 UTC
From: hanko@wv.mentorg.com
Message-ID: <2d08eo$mi4@wvhpadm1.mentorg.com>
Source record: 51012

In article <1993Nov23.163518.13551@hemlock.cray.com>, andyw@aspen32.cray.com (Andy Warner) writes:
|>
|> In article <2ctp3q$h25@wvhpadm1.mentorg.com>, hanko@wv.mentorg.com (Hank Oredson) writes:
|> > [...]
|> > And that Namibia is in Africa and not in North America.
|> > And is never addressed with one of those really stupid internet
|> > TWO letter designations. At least we got one thing right in
|> > the bbs network: we used the THREE letter country codes ...
|>
|> Err, the site that ended up with a pile of xxx.usa.na messages
|> was in Namibia, and it's official domain name *did* end in .na
|> Actually, since the guy had to pay for all those messages to
|> get delivered over a long distance UUCP connection, and then
|> pay again while they bounced (until he at least stopped that),
|> I thought he was more than reasonable about the whole affair..
|>
|> > And any reasonable router should be able to tell the difference
|> > between USA.NA and something in Namibia - or does Namibia have
|> > a USA sub-domain ?
|>
|> And here we have it, the "left to right" parsing thinking that
|> brought you the # fields in PBBS addresses. If someone wants
|> to call a domain in Namibia "usa" then they are entitled to.
|>

My point was a much simpler one: "someone" in Namibia did NOT choose to have a sub-domain USA, so any reasonable inter-network gateway could handle the problem very simply. What in holy hoobles does this have to do with "left to right parsing"? It has only to do with what the application does with the information AFTER it has been (mis) parsed. And by the way, I was thinking "right to left" not "left to right", but that is moot.

In even simpler terms: once the application has parsed off the very last field (NA) and then looks at the next field (USA), it can certainly notice that there ARE no sub-domains USA.NA in Namibia ... or is the Internet addressing scheme to stupid to allow for things like this?

(Yes, I know how things are supposed to work in the internet, and yes I have all the appropriate RFCs, etc.)

The real problem here is that the inter-network router somehow "forgot"
that BBS network domains have an implied "ampr.org" at the end of them.
As in w0rli@w0rli.or.usa.na.ampr.org ...

... Hank

|> Sigh..
|> --
|> andyw N0REN/G1XRL
|>
|> andyw@aspen.cray.com Andy Warner, Cray Research, Inc. (612) 683-5835

--

Hank Oredson @ Mentor Graphics
Internet : hank_oredson@mentorg.com
Amateur Radio: W0RLI@W0RLI.OR.USA.NA

874. Re: Packet antenna?????

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-24 18:19:01 UTC
From: hanko@wv.mentorg.com
Message-ID: <2d08il$mi4@wvhpadm1.mentorg.com>
Source record: 51013

In article <2ctk3n$11j0@alf.zfn.uni-bremen.de>, g14b@alf.zfn.uni-bremen.de (Kai Bartels) writes:
|> >>>What would a good 2m packet antenna
|> [...]
|> >>a yagi.
|>
|> In article <1993Nov15.141900.18252@cc.gatech.edu>,
|> Harold C. Forbes <harold@cc.gatech.edu> wrote:
|>
|> >While anything may work, directional antennas should not be
|> >your first choice, because they increase the hidden node
|> >problem. Use an omni antenna, unless there is no way to
|>
|> Would the same problem arise if two stations connect using two directional
|> antennas? They only hear each other and no one else can hear them, right?
|>

And in fact this technique is often used on backbone frequencies
to provide for frequency re-use. We have several examples of this
here in the NW Oregon / SW Washington 9600 baud network. Nice big
yagis allow longer hops, and several different links using the
same frequency.

... Hank

|> > harold
|> just curious, Kai
|> --
|> "It sounds like a whisper Don't you know" <Tracy Chapman>
|> Uni: g14b@alf.zfn.uni-Bremen.de + Home: kaba@wintermute.north.de
|> Snail: Kai Bartels + c/o Junknickl + Kohlmannstr. 1 + 28359 Bremen + FRG
|> (pgp key on request)

--

Hank Oredson @ Mentor Graphics
Internet : hank_oredson@mentorg.com
Amateur Radio: W0RLI@W0RLI.OR.USA.NA

875. Re: Max BAUD on 6M AM & FM

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-24 18:42:56 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1993Nov24.184256.7536@ke4zv.atl.ga.us>
Source record: 51018

In article <2644@arrl.org> jbloom@arrl.org (Jon Bloom, KE3Z) writes:
>In rec.radio.amateur.digital.misc, gary@ke4zv.atl.ga.us (Gary Coffman) writes:
>>In article <2635@arrl.org> jbloom@arrl.org (Jon Bloom, KE3Z) writes:
>>>In rec.radio.amateur.digital.misc, gary@ke4zv.atl.ga.us (Gary Coffman) writes:
>>>>So you're limited to 19.6 kb *and* a maximum bandwidth of 20 kHz.
>>>
>>>Ah, no. What the rule says is that when you are using a specified
>>>digital code from 97.309(a), you can send at up to 19.6 kbauds. When
>>>you are using "any digital code" you can send within a 20-kHz bandwidth.
>>>The first two sentences go together; the last two sentences go together.
>>>(This was a lot more obvious before the latest rules rewrite. Old
>>>part 97.69 contained each set of code and signaling restrictions together
>>>in a common subparagraph.)
>
>>When we queried the FCC about our 56 kb modem, they told us that
>>*both* the 56 kb and 100 kHz limitations applied on 1.25m and 70cm.
>>Apparently they read the regulation the way I do.
>
>Please email me the name and title of the FCC person who gave you that
>information. That is *not* the interpretation we have gotten from PRB.
>It also is not consistent with the previous rule, which was not stated
>to have been changed in the last rewrite.

I'll ask the person who made the call and get back to you.

>>Packet does not use any of the specified codes in 97.309a. It's specified
>>in the AX25 standards document, accepted by the FCC, as transmitting *octets*
>>of synchronous data. As such, it always falls under the any other digital
>>code provisions. Whether ASCII characters are *embedded* into some of the
>>octets or not is irrelevant.
>
>No, a code is a mapping from a character set to a binary value. The FCC
>is quite explicit about the allowed codes, citing them by their national
>and international standard designators. And those standards are quite
>explicit, too: they map the character set onto a set of binary values.
>They say *nothing* about how the bits are sent. You can send ASCII code
>via async (start and stop bits), synchronous (e.g., monosync or bisync),
>or in HDLC frames (like AX.25 does); it's still ASCII. An "unspecified
>digital code" is one that does not follow the mapping of the referenced
>standards, regardless of what modem or synchronization standard is used
>to transmit it.
>
>And the AX.25 document says nothing about the coding of the data field
>except that it must be an integer number of octets. You can send data
>via packet using the Baudot code if you like--and you won't be using

>an "unspecified digital code."

Actually, as I read 97.309(a)(1) "The 5-unit, start-stop, International Telegraph Alphabet No. 2 code" is describing Baudot, and async (start-stop) transmission is certainly specified. So I think you're wrong about that. The CCIR 625 TOR code is specified in (2), but 625 too specifies a transmission protocol, actually two, ARQ and FEC, as part of it's definition. And (3) is ISO 646 which is ASCII. The ISO 646 definition is the only one that doesn't inherently specify a transmission protocol, though it does specify a bit order.

So if I'm reading 97.307(f)(3) and (4) correctly, and what you say is right, then only ASCII plain text can be transmitted by packet on HF. That means no encapsulated network layer binary headers as TCP/IP uses, nor any binary file transmissions, nor compressed bulk Email transmissions would be allowed. Yet we know all three are routinely being done.

Also, what you said earlier means I can, according to 97.307(f)(5) and (8) transmit a J9D emission on 6 meters at a symbol rate of 19.6 kb even though that would be a minimum bandwidth of 49.2 kHz, maximum unspecified, as long as I'm using a specified code in the data fields. But if I use an unspecified code I can only occupy 20 kHz. Somehow I can't picture that as being what they meant.

Gary
--
Gary Coffman KE4ZV | Where my job's going, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | I don't know. It might | uunet!rsiatl!ke4zv!gary
534 Shannon Way | wind up in Mexico. | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -NAFTA Blues |

876. Re: Ham Radio - Internet gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-24 19:08:00 UTC
From: bob@arasmith.com
Message-ID: <2d0beg$rh1@hal.com>
Source record: 51014

In article 231193082417@node_13059.aieg.mot.com, rcrw90@email.mot.com (Mike Waters) writes:
>
> There are Internet/PBBS gateways for E-mail though, although they tend to
> be somewhat awkward to use.

This is not totally true, while some are awkward I have spent a great deal of time to make mine rather user friendly. For example to send a message to a packet user that is in my white pages database you simply address it as:

n6zfj@bbs.arasmith.com

If they are not in the white pages you can supply as much address as you like, but normally only the bbs should be necessary.

n6zfj%n6qmy@bbs.arasmith.com

Notice the '%' where you would have a `@` in packet. Not that big of a change. My bbs knows of most other bbss so adding the entire hloc is normally not necessary.

When an internet user registers with my gateway, required before traffic can pass from internet to packet. They are given an account on my bbs and email forwarding enabled. Thus if you were registered, a packet user could send you a message at rcrw@email.mot.com simpy by sending it to:

AA4MW@N0ARY.#NOCAL.CA.USA.NA

I cannot think of how to make it much simpler to use. From the packet side the sender has no idea you are actually receiving your mail on internet. You just look like a normal user on my bbs. Those of us on the internet side of things are used to strange addresses so changing the '@' to a '%' should not represent that much of a challenge.

In addition to this as a registered internet user you can run all the commands on the bbs via email as well. Kind of handy for batching up bbs commands and attaching it to a cron. Say you were looking for a TS-850 or TS-950. You could send this command everyday and see what had arrived on packet:

LIST NEW TO SALE ABOUT "TS.*[89]50"

I love regular expressions :)

My goal in this is to get as many people "connected" as possible. And field as few questions as possible :) The simpler the better.

If you want full instructions for the gateway send a message to:

gateway_info@arasmith.com

73

Bob Arasmith
bob@hal.com (work)
bob@arasmith.com (home)
n0ary@n0ary.#nocal.ca.usa.na (packet)

877. AMSAT/Satellites

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-24 19:21:28 UTC
From: jim@g3wgm.demon.co.uk
Message-ID: <754168888snz@g3wgm.demon.co.uk>
Source record: 51015

I have only recently become active on the internet.
I would be most grateful if someone could advise me on where
I can get hold of AMSAT/Amateur Satellite news. The HAMNET forum
on Compuserve used to be quite active, but there is not much
stuff of interest there these days, mainly just KEPS.
Any info/help would be appreciated 73s
--
Jim Heck , G3WGM Sussex, England. Jim@G3WGM.demon.co.uk

878. (none)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-24 20:17:16 UTC
From: michaelbl@comm.mot.COM
Message-ID: <9311242017.AA01347@cradap05>
Source record: 51016

Re: FT-530 problem

Seth,

Regarding your FT-530. Mine also has the problem. I called the factory, and they said they'd fix it for free (not counting shipping :-) even if it is outside the warrenty (sp?) period. They will also, for free, do a mod which moves the IF for 440 to reduce intermod in populated areas. I haven't sent mine in yet (still having too much fun with it), but plan to once thing slow down here. Don't know if I'll have them do the IF mod. I'd like to hear from someone else who's had it done, first.

Hope this helps. btw, the extended freq mod will let you in the 800-900 band...

enjoy et 73 et cul de n9tsi (mike)

879. Re: wb7tpy gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-24 20:43:26 UTC
From: hanko@wv.mentorg.com
Message-ID: <2d0h1e$mse@wvhpadm1.mentorg.com>
Source record: 51017

In article <1993Nov24.144257.18843@schbbs.mot.com>, CSLE87@maccvm.corp.mot.com (Karl Beckman) writes:
|> Sorry, I just couldn't resist tweaking you, Hank. You may agree, and
|> your documentation starting with 16.6 may use only the four-letter
|> abbrevs, but you'd better also CHANGE YOUR SIG FILE!!
|> Keep up the good work on removing these address conflicts. Problems
|> like NAmibia will only give amateur radio a poor image and make it more
|> difficult to keep the Internet/Amateur links functioning. 73-WA8NVW

If anyone does not understand that my sig has two different network addresses, and does not understand how to use which address in which network, perhaps they should make use of the power switch on their computer ... hi hi ...

Again - the point is that it is assumed that ham radio addresses belong in the domain ampr.org whether that is stated or not.

My other address is in the .com domain, but folks here in the building certainly do not specify the "mentorg.com" - the mail routers take care of that for them. Just as internet/hamnet routers should take care of things. Let the computers do the work ...

... Hank

|> ------------------------ Original Article ------------------------
|> From: hanko@wv.mentorg.com (Hank Oredson)
|> Newsgroups: rec.radio.amateur.digital.misc
|> Subject: Re: wb7tpy gateway
|> Date: 23 Nov 1993 19:38:11 GMT
|> Organization: Mentor Graphics, Wilsonville, Oregon, USA
|> Lines: 35
|> Message-ID: <2ctor3$h25@wvhpadm1.mentorg.com>
|> References: <KENJI.93Nov16200241@reseau.k2r.or.jp> <5TH7cc1w165w@nj8j.atl.ga.us>
|> Reply-To: Hank_Oredson@mentorg.com
|> NNTP-Posting-Host: hanko.mentorg.com
|>
|> In article <2cmfh4$n3r@juniper.almaden.ibm.com>, enge@enge.almaden.ibm.com () wr
|> |> In article <2cjnvhINNlfa@network.ucsd.edu>, Brian Kantor
|> |> <brian@nothing.ucsd.edu> wrote:
|> |> >Is there really anyone in the world who doesn't know that the USA is
|> |> >on the continent of North America? Then why is the .NA required?
|> |> >Stupid software?
|> |> > - Brian
|> |>
|> |> The original purpose of the continents was to make life easier for the
|> |> "average-Joe" SYSOP. One might route anything-to-Europe to a certain

```
|> |> station which save having to know every country code.
|> |>
|> |> Besides, it HI.USA.OC not .NA...
|> |>
|> |> I would like to see the '2 letter" continent codes go away and only use
|> |> the 4 letter ones. Lets either abandon one or the other.
|> |>
|> |> Roy Engehausen, AA4RE
|> |> enge@almaden.ibm.com
|> |>
|>
|> Let's abandon the two letter ones right now today forthwith.
|>
|> My distribution examples use NOAM as of version 16.6 ...
|>
|> (Oh oh - done it again - Hank and Roy agreeing on something)
|>
|> ... Hank
|>
|>
|> --
|>
|> Hank Oredson @ Mentor Graphics
|> Internet : hank_oredson@mentorg.com
|> Amateur Radio: W0RLI@W0RLI.OR.USA.NA

--

Hank Oredson @ Mentor Graphics
Internet : hank_oredson@mentorg.com
Amateur Radio: W0RLI@W0RLI.OR.USA.NA
```

880. Re: ATM on Amateur Radio?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-24 21:47:29 UTC
From: im@hydra.CARLETON.CA
Message-ID: <CH0n75.CM2@cunews.carleton.ca>
Source record: 51020

Karl writes:
>I think the major issue here is where you are going to find this
>bandwidth not already occupied at least in part by amateurs on other
>modes. The AT&T announcement was a greatly REDUCED bandwidth from the
>normal tens of MB required for ATM. Right now the hams get upset when
>a few kHz disappear, so don't expect a hero's welcome when you announce
>that you need room for a 26 MB data stream to replace 1200 baud packet,
>and therefore are taking over ALL of the 430-450 band (minus the NOAA
>Doppler Radar window, of course!) for the first test system. Let's find
>ways to work in narrower BWs, since the bands aren't growing in the same
>fashion as cable or fiber bandwidths. It's sort of like telling Microsoft
>that disks are shrinking, not growing, so Word 6 has to take 30% LESS on
>the hard drive than the previous version. A terribly radical thought, do
>more with less, like we've been hearing from business for several years
>now.

First off there is nothing saying that Amateur Radio ATM will need
26 Mbps, or anything on that order to do something usefull.

The telco standards people are looking to map ATM cells onto T1
carriers right now, and when that is done there is talk that
they'll map ATM cells onto DS0's too!

Secondly there could be some interesting benefits to a Ham implementation
of ATM. Can you imagine a data standard that could pass both voice, data
and video with appropriate handling? Like not delaying or ARQing
the voice (voice is perfectly good with BERs of 10**-4), ensuring that
voice and image are syncronized. File transfers that can use full
bandwidth for short durations, when necessary. Character mode data
that allows you to use things like visual editors over the network.

With Ham ATM, maybe in a few years all this antique FM and congestion
one the 2m & 70cm band would be aleviated allowing more BW for
cool things like all the satellites that will be put up in
the future!

Expand your mind abit further and imagine an ATM switch on the Phase 4
Ham satellite, to switch your packets quickly over to the beam
on europe, to download the latest version of GRINOS, while simultaneously
enjoying a ragchew with a group of VK's in the outback, through
the beam pointed towards Auz.

I think the big benefit of something like ATM will be integrating
voice and data in the ham world!

im

--
Ian A. McEachern, VE3PFH | This space for rent.
Packet Working Group, Ottawa A.R.C. |
im@hydra.carleton.ca |
ian@ve3pfh.ampr.org |

881. FT-530 Glitch

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-24 21:49:13 UTC
From: RGS%gms@gfimda.UUCP
Message-ID: <931124164913.b4a@GMS>
Source record: 51019

>I ran into a problem enabling "auto page acknowledgement". When
>entering "F/set/9" it displays PA OFF and will not toggle to PA ON.
>This does work on my friend's unit.

I seem to recall seeing something on either Info-Hams or HAMNET about this. Apparently, two lots (#'s 12 & 13?, I can't remember) of FT-530's had this problem. You will need to contact Yaesu. I believe they were giving the problem warranty coverage. I disregarded the messages since I have unit from lot #18.

+------------------------------+--+
Robert G. Schaffrath, N2JTX	Internet: rgs%wpmax2%gfimda@uunet.uu.net
Systems Engineer	CompuServe: 70541,435
Maxwell House Coffee Company	Phone: 914-335-2777
Kraft General Foods Corp.	Slogan: "ervice is ur mott"
+------------------------------+--+

882. Re: Max BAUD on 6M AM & FM

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-25 04:37:06 UTC
From: andrews@fms.com
Message-ID: <CH165v.Ctn@fms.com>
Source record: 51021

In article <1993Nov22.141714.22356@ke4zv.atl.ga.us> gary@ke4zv.atl.ga.us (Gary Coffman) writes:
>In article <CGuw4x.L0y@fms.com> andrews@fms.com (Andrew Sargent N8OFS) writes:
>>In article <1993Nov21.135728.17393@ke4zv.atl.ga.us> gary@ke4zv.UUCP (Gary Coffman) writes:
>>>
>>>97.307f(5)
>>>A RTTY, data or multiplexed emission using a specified digital code
>>>listed in 97.309(a) of this Part may be transmitted. The symbol rate
>>>must not exceed 19.6 kilobauds. A RTTY, data or multiplexed emission
>>>using an unspecified emission using an unspecified digital code under
>>>the limitations listed in 97.309(b) of this Part also may be transmitted.
>>>The authorized bandwidth is 20 kHz.
>>>
>>Yea, that's what my rulebook says. Still sounds like lawyer gibberish
>>to me...
>
>Note these are the *plain language* rewrite version of the rules. You
>should have seen the old rules. :-)
>
Yea, your probably right... :)
>
>>>So you're limited to 19.6 kb *and* a maximum bandwidth of 20 kHz.
>>>The latter is the real limit for simple modulation encodings such
>>>as FSK, or AFSK over AM or FM radios. With current amateur techniques,
>>>that's a limit of 2400 baud for AM or FM. The PSK scheme used in 9600
>>>baud modems would fit the bandwidth using SSB radios, and MSK would permit
>>>16.6 kilobaud. No presently used amateur technique can squeeze 19.6 kilobaud
>>>into 20 kHz.
>>>
>>OK, so 2400 baud is the max using AX.37 packet with commercial FM gear.
>
>Hmm. I meant to comment on this the first go round. I don't know what
>AX.37 is. In amateur radio we use *AX25* packet. Note that the 2400 "baud"
>modems sold by Kantronics aren't really 2400 baud. They're 2400 bits per
>second. See below for discussion.
>
AX.37 is the amateur version of the X.37 protocoll. AX.37 works _much_
better than AX.25, to bad all those no-codes will probably never learn.
>
>>>NOTE: For the more complex modulations, baud != bps. You can encode more
>>>than one bit with a single baud, thus achieving higher effective bps
>>>transfers. 38.4 kbps should be possible with amateur grade techniques.
>>>Compression techniques should increase that even further.

>>>
>>Ummm, wait a minute. I thought encoding and compression was illegal
>>because the FCC dosen't think it's standard.
>
>Encoding is legal, else Morse *Code* would be illegal. :-)
>What the rules say is that you can't use codes and ciphers with
>the *intent* of obscuring the meaning of the transmission, except
>for certain telecommand functions where encryption with the intent
>of obscuring meaning is allowed. Since the encoding and compression
>methods are *intended* to facilitate transmission, not obscure meaning,
>they are perfectly legal. If you use something that isn't an industry
>or amateur standard, you have to keep a log entry explaining the
>encoding with your station records in case the FCC ever wants to
>know what you're doing. But if you use one of the industry or amateur
>standard encodings, you have no problem.
>
Ummm, OK. I'm with ya so far...
>
>If you reread the second half of 97.305f(5) quoted above, you'll
>see that "unspecified emissions and unspecified codes" are
>affirmatively allowed. It's standard amateur and industry practice
>to use bit encodings of multiple bits per baud. The classic example
>is the 2400 bps V22bis standard. The modem actually runs at 600 baud
>with 4 bits per baud encoded into the modulation. There are several
>LZW style compression schemes that are industry or amateur standards,
>such as Pkzip, that you can use with impunity on the data being fed
>to the modem, and on-the-fly LZW compression methods like those used
>in MNP5 and V42bis are also perfectly fine. Also most advanced modems
>use a data scrambler in order to facilitate good spectrum usage and
>to aid in clock recovery. This is *not* encryption.
>
OK, keep talking...
>
>For international contacts only, there is the additional restriction
>that permission to use unspecified codes must have been granted by both
>countries. Otherwise, you're restricted to the telegraphic alphabets
>enumerated in 97.309a (basically Baudot, async ASCII, and the sync
>code used by AMTOR). Note that packet does *not* use ASCII. It transmits
>synchronous *octets* of bits that can represent whatever the users want
>them to represent. We often use padded ASCII in the octets, but that's
>not required, we also often transmit binary file images via packet.
>
This will not be for international use, just a couple of No-Codes who
want to set up _our own_ packet link for a new kind of BBS.

So what _is_ the highest baud rate??? I think I'm confused again...
>
>Gary

--
Tell Me Something I Don't Know, ! HAM = N8OFS

Show Me Something I Can Use, ! ARMY MARS = AAN5HJT
Push The Buttons, ! CB = THE NEON KNIGHT
Connect The God-Damn Dots!!! - Ministry ! HACKER = TH3 N30N KN16Ht

883. Re: Max BAUD on 6M AM & FM

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-25 04:46:34 UTC
From: andrews@fms.com
Message-ID: <CH16LM.CxK@fms.com>
Source record: 51022

In article <2crl96INNodo@network.ucsd.edu> brian@nothing.ucsd.edu (Brian Kantor) writes:
>The California Intercity Trunk uses 4800 baud FSK on 6 meters. We use
>4800 bps because the filters in the Mocom-70s that were the original
>equipment on the system wouldn't accomodate 9600 baud FSK at an
>acceptable bit error rate.
>
>Newer single-conversion radios with more modern filters might, and some
>experimentation with this is probably appropriate.
>
>I think it would be reasonable to request an STA to allow 56kb or higher
>data rates experimentally on 6 meters. It think it might work well,
>especially around here, as it's the only amateur band below microwave
>that has space and lacks radar interference.
> - Brian
I need paperwork, please send me the data!!! If your doing that over
in Cali, then I can sure do it in N.Ohio!!! BTW, we'll be using Mot
Micor's if that helps. Somebody has to have a straight-forward answer
to my orrigional post! Just to let you know, there are a group of
Extra Class Communists up here in Ohio that scrutinize every damn thing
we No-Codes try to experement with, we want to make sure it's legal _and_
have the documentation to prove it before we put it on (or in) AIR!

--
Tell Me Something I Don't Know, ! HAM = N8OFS
Show Me Something I Can Use, ! ARMY MARS = AAN5HJT
Push The Buttons, ! CB = THE NEON KNIGHT
Connect The God-Damn Dots!!! - Ministry ! HACKER = TH3 N30N KN16Ht

884. Re: Ham Radio - Internet gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-25 06:45:56 UTC
From: kenji@k2r.or.jp
Message-ID: <KENJI.93Nov25154556@reseau.k2r.or.jp>
Source record: 51024
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.policy

In article <rcrw90-231193082417@node_13059.aieg.mot.com> rcrw90@email.mot.com (Mike Waters) writes:
|In the US a packet message is "third party traffic" for the relaying
|stations no matter *who* originates it. If a ham originates the message
|then only the link from the first station to the BBS or relay is non "third
|party".

You're right. Maybe not only in the USA.

|On the other hand ham radio can well be used to supplement other services.
|Emergency response is one of the most obvious of these.

I also want to emphasize this point -

|Personally I think we should be able to carry much of Netnews via ham radio
|for example (or at least FIDO!). As far as I know that is not done today.

We're running our own NetNews groups in Japanese called ampr.*. There are some other local newsgroups here.

|There are Internet/PBBS gateways for E-mail though, although they tend to
|be somewhat awkward to use.

Quite a few PBBS operators in Japan do not want to see messages of non-licensees. I am against this attitude so I don't run nor recommend people to run PBBS nodes.

|Another use I have seen is for a yacht in the South Pacific to submit an
|article via packet to a (nonprofit) club magazine in Ft. Lauderdale.
|Appeared to work very well and was much faster than the mail in that part
|of the world.

A practical use of ham radio - ham radio people must support non-profit activities, I believe. Otherwise, airwave bandwidth for ham radio people should be reallocated for other public services.

// Kenji
--
Kenji Rikitake <kenji@k2r.or.jp> <kenji@rcac.astem.or.jp> (More available!)
Persuade me you may, but I won't be persuaded. -- Aristophanes

885. Re: wb7tpy gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-25 06:51:58 UTC
From: kenji@k2r.or.jp
Message-ID: <KENJI.93Nov25155158@reseau.k2r.or.jp>
Source record: 51023

In article <2ctoto$h25@wvhpadm1.mentorg.com> hanko@wv.mentorg.com (Hank Oredson) writes:
|What routing information?

The requirement of including regional/geographic information into the
mailing address. This will not work.

|These are NOT routes we are talking about ...
|they are locations ...

Locations are geographic information :)

|I think all the bbs authors understand that a location is
|not a route, and address is not a route nor a location,
|etc. etc.

People tend to interpret location info can be used for routing. This
doesn't work. See "The Internet Message - Closing The Book with
Electronic Mail", by Marshall T. Rose for how OSI X.400 failed by not
specifying resolution mechanism between addresses and routes.

// Kenji
--
Kenji Rikitake <kenji@k2r.or.jp> <kenji@rcac.astem.or.jp> (More available!)
Persuade me you may, but I won't be persuaded. -- Aristophanes

886. Re: wb7tpy gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-25 06:54:22 UTC
From: kenji@k2r.or.jp
Message-ID: <KENJI.93Nov25155422@reseau.k2r.or.jp>
Source record: 51025

In article <2d08eo$mi4@wvhpadm1.mentorg.com> hanko@wv.mentorg.com (Hank Oredson) writes:
|The real problem here is that the inter-network router somehow "forgot"
|that BBS network domains have an implied "ampr.org" at the end of them.
|As in w0rli@w0rli.or.usa.na.ampr.org ...

It's all up to ampr.org domain administrator (namely Brian Kantor) to
accept this or not.

// Kenji

--
Kenji Rikitake <kenji@k2r.or.jp> <kenji@rcac.astem.or.jp> (More available!)
Persuade me you may, but I won't be persuaded. -- Aristophanes

887. Re: wb7tpy gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-25 06:59:56 UTC
From: kenji@k2r.or.jp
Message-ID: <KENJI.93Nov25155957@reseau.k2r.or.jp>
Source record: 51026

In article <2ctpip$h25@wvhpadm1.mentorg.com> hanko@wv.mentorg.com (Hank Oredson) writes:
|If people would simply STOP trying to connect the two networks,
|the problem would just go away.

I disagree. At least some part of ham radio community want to
communicate with Internet. And I see no ethical issues on connecting
these networks, although laws must be changed.

|Now folks want to connect them.

yes.

|There is certainly no problem creating some new top level domain
|for the bbs network - but why bother? We have one already: it
|is ampr.org ... so what is the problem with using that at the gates?
|Anything that came from the bbs net gets appended .ampr.org when it
|moves to the internet. Same thing the other way: the .ampr.org gets
|dropped once the traffic is inside that net.

In near future PBBS systems should be re-written to keep ampr.org
INSIDE the network. Mail addresses should be treated as is.

|Is there some problem with this concept?

I think it's ok as long as ampr.org domain administrator agrees.

|w0rli@w0rli.or.usa.noam.ampr.org - no big deal for any router to handle.

No. :)

|Oh yes, I know about the issues with tcp/ip - but tcp/ip within the bbs net
|is yet a different issue. One still needs the hierarchical location
|information, since many services do indeed use those identifiers as routing
|hints (ROUTING HINTS, not ROUTES ...) and we would like to continue to do
|so.

Well, in fact. parsing identifiers to obtain routing information is
acceptable.

// Kenji
--
Kenji Rikitake <kenji@k2r.or.jp> <kenji@rcac.astem.or.jp> (More available!)
Persuade me you may, but I won't be persuaded. -- Aristophanes

888. Re: wb7tpy gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-25 11:28:14 UTC
From: eeyimkn@unicorn.nott.ac.uk
Message-ID: <2d24se$dam@unicorn.ccc.nottingham.ac.uk>
Source record: 51027

In article <2d08eo$mi4@wvhpadm1.mentorg.com> Hank_Oredson@mentorg.com writes:
>In even simpler terms: once the application has parsed off the
>very last field (NA) and then looks at the next field (USA), it
>can certainly notice that there ARE no sub-domains USA.NA in
>Namibia ... or is the Internet addressing scheme to stupid to
>allow for things like this?
A quick DNS trawl courtesy of nslookup reveals:

na. SOA rain.psg.com hostmaster.ns.psg.com. (9307100 345600 7200 2592000 691200)
(snip)
na. MX 10 kudu.ru.ac.za
na. MX 20 hippo.ru.ac.za
na. MX 100 rip.psg.com
na. MX 150 m2xenix.psg.com
* MX 10 kudu.ru.ac.za
* MX 20 hippo.ru.ac.za
* MX 100 rip.psg.com
* MX 150 m2xenix.psg.com

So, all mail to Namibia should go through South Africa anyway. What happens
then depends on what ru.ac.za does with it.. hopefully, it'd be sensible enough
to bounce anything @n9zzz.#zz.usa.na. If it doesn't, something's broke
somewhere..

Mike

--
+- Mike Knell, University of Nottingham, UK -=- M.Knell@unicorn.nott.ac.uk --+
| --THIS SPACE TEMPORARILY BLANK-- | AMPR: g7gpa@hobbes.g7gpa.ampr.org |
| (until I can think of a decent joke)| AX25: g7gpa@g7gpa.gb7bad.#23.gbr.eu |
|UNDER the overpass! OVER the underpass! Around the future and BEYOND REPAIR!|

889. HAM-server index update

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-25 12:19:50 UTC
From: HAMSinfo@GRAFex.sbay.org
Message-ID: <gate.754229990@GRAFex.sbay.org>
Source record: 51030
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc

```
Executed: Thu Nov 25 07:19:48 1993

HAM-server updated index ------------------------------------------------

The following has been changed:

Added SUPERIOR.SHR to /hamradio/morse
Moved /hamradio/packet/mlhacker to /hamradio/newsletters

If you do not know how to use HAM-server, send email to
HAM-server@GRAFex.sbay.org.
In the text, place HELP.

Orders must be sent to HAM-server. Orders sent to KA6ETB or HAMSinfo are
ignored. If you are reading this from usenet, do not respond to this post.
You must send email to HAM-server@GRAFex.sbay.org.

A new INDEX is automatically generated weekly and when files are moved or
added.

The archives may contain the same file under different names. If you should
run across one of these, please let me know with email to
KA6ETB@GRAFex.sbay.org

NOTE: Contributions are gratefully accepted. Send to
incoming@grafex.sbay.org
Send email with a short description (so I know where to put it) to
KA6ETB@grafex.sbay.org

------------------------------------------------------------------------------
```

890. Re: Packet antenna?????

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-25 13:45:26 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1993Nov25.134526.10533@ke4zv.atl.ga.us>
Source record: 51028

In article <2ctk3n$11j0@alf.zfn.uni-bremen.de> g14b@alf.zfn.uni-bremen.de (Kai Bartels) writes:
>>>>What would a good 2m packet antenna
>[...]
>>>a yagi.
>In article <1993Nov15.141900.18252@cc.gatech.edu>,
>Harold C. Forbes <harold@cc.gatech.edu> wrote:
>
>>While anything may work, directional antennas should not be
>>your first choice, because they increase the hidden node
>>problem. Use an omni antenna, unless there is no way to
>
>Would the same problem arise if two stations connect using two directional
>antennas? They only hear each other and no one else can hear them, right?

Well if you can guarantee that to be the case, then yes, yagis would be good. But usually you can't. Usually the node will hear one or the other of you anyway since it's usually at a very favorable location. And stations that happen to be along your beam will hear you while those off the back likely won't. So you're a hidden terminal.

Hidden terminals are hard to avoid on simplex lans, even if everyone is using omni antennas. With beams, it only gets worse. The better solution to the hidden terminal problem is to use a duplex repeater, similar to a voice repeater, that merely acts as a bent pipe to ensure that everyone is heard. The repeater immediately retransmits everything it hears without waiting to validate the frame. All the user stations are listening to the repeater output, so they hold off transmission if any other station is transmitting. This nearly completely removes the hidden terminal problem, and removes the retransmission delay and effective halving of throughput that a simplex digipeater or node introduces. In that case, beams pointing at the repeater are fine. The system becomes hub and spoke instead of a random cloud.

Gary
--
Gary Coffman KE4ZV | Where my job's going, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | I don't know. It might | uunet!rsiatl!ke4zv!gary
534 Shannon Way | wind up in Mexico. | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -NAFTA Blues |

891. Re: USA and NA

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-25 15:57:35 UTC
From: ad950@Freenet.carleton.ca
Message-ID: <CH21o1.As3@freenet.carleton.ca>
Source record: 51029

Brian,

I guess that this is the convention that everybody agreed on and
that if we want a system that work, everybody should stand by it

Richard (VE2CH)
AD950@freenet.carleton.ca

892. W3IWI paper #4: Concerning continent designators

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-25 19:18:19 UTC
From: enge@almaden.ibm.com
Message-ID: <19931125.111914.253@almaden.ibm.com>
Source record: 51031

Here is W3IWI,s original posting

Date: Mon, 20 Aug 90 15:21:08 UTC

Some comments on the "H"ierarchical Continent Address Designator

---

Tom Clark, W3IWI
6388 Guilford Road
Clarksville, MD 21029

At the risk of opening Pandorra's Box, this note suggests a change in the 2-character continent designator portion of the PBBS "H" hierarchical address field. An example would be the North America .NA portion of the packet address,

K9DOG @ W6SIX.DE.USA.NA

Let me state at the outset that I'm not convinced that we need to use the continent field. It seems to me that the country field by itself is adequate and that the packet BBSes can easily keep track of all the countries in the world. Let me also state that many of the issues addressed here arise because of constant confusion between the functions of addressing and routing.

The correct continent to assign to many countries of the world is confusing and/or ambiguous. To cite some examples of problems which have already been identified:

- 5B4=Cyprus in the Mediterranian is listed by the IARU (for WAC) and the ITU as Asia. Ditto 4X=Israel and JY=Jordan in the middle East.

- Both TA=Turkey and and the Soviet Union have part of their counties in Europe and part in Asia. 8Q6=Maldives is listed as both Africa and Asia. Several other countries are also "split".

- Although DU=Philipines and YB=Indonesia are regarded as Asiatic countries, the are listed as Oceania, along with Australia and Hawaii. If you venture to 9M=Malasia, you may be in either Oceania or Asia.

- The Central American and Carribean countries are nearly all part of North America, including YV0, but not 9Y. Anyone care to guess what continent the southern part of HP=Panama is in?

If the purpose of the continent portion of the "H"ierarchical address is to facilitate delivery of messages, then it is illogical to route Israeli and Jordanian traffic through the Orient. It is illogical to make automated routing decisions for messages to Turkish amateurs based on whether the addressee is on the east or west side of the Straits of Bosporus.

Stations in Israel and Cyprus already face this dilemma. Rather than using a .AS Asian address, they choose to use .EU European designator to avoid having their packet mail routed via the Orient. Some have suggested the use of a new continent designator other than .AS; One suggestion has been .ME (Middle East) but this has a serious conflict with the state of Maine.

The Central Americans and the Carribean are both "legally" .NA but feel they need a separate geographic identity and both areas have independently suggested the use of .CA but this would conflict with .CA state.
All this leads to my suggestion that the present 2-letter continent designator must be changed. Either:

(1) The present 2-character designator should be dropped because it it not really needed and there are too many ambiguities. Users will always try to use address quirks to force routing, so don't give them the chance to fould things up. The computers at the international mail gateways can easily handle the entire DXCC list.

- or -

(2) A new logical regional designator which allows sub-continent sized regions should be adopted.

If a new, more flexible scheme is to be adopted, I'd suggest that new 4-character designators be chosen:

- .NOAM, .SOAM, .CEAM, .CARB replacing the present .NA & .SA and solving the Central American and Carribean problem,

- .ASIA replacing .AS for the Orient,

- .MDLE for the middle-eastern countries like 4X, JY etc.,

- Oceania divided into smaller areas like .NPAC, .SPAC, .AUST,

- The Indian ocean (now partly in .OC and partly in .AF) be designated .INDI,

- .AFRI replacing .AF for Africa and .EURO replacing .EU for Europe,

- .ANTR added for Antarctica,

- Additional new designators added as needed for sub-continent sized logical areas.

This scheme affords the logic of a 2-character field (.MD) for the "state", 3 characters (.DEU) for the country, & 4 (.AFRI) for the conti-

nent/subcontinent and avoids conflicts between state-sized areas and continents. Who knows, a few decades hence a 5 character field (.EARTH, .VENUS) may be needed too!

[Note: Because of issues raised in this note, the W3IWI PBBS does not use a continent designator on any of its own transactions, although it transparently passes any originated elsewhere].

893. Re: Packet antenna?????

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-25 21:42:00 UTC
From: lawrence@combdyn.com
Message-ID: <1993Nov25.214200.1196@combdyn.com>
Source record: 51036

In article <CGFn2q.9DH@freenet.carleton.ca> aa963@Freenet.carleton.ca (Lloyd Carr) writes:
>
>In a previous article, fsrla@aurora.alaska.edu () says:
>
>>What would a good 2m packet antenna
>>be??? I'm not using packet right
>>now, but hope to soon. However,
>>all I have up right now is a
>>2 element quad. Is this to weak?
>>What should I try??????
>>Thanks for the help!!!!!!!
>
>Anything will work. I use a Ringo Ranger vertical. If you're
>quite a distance away from your main feed, you could use
>a yagi.

I've had people say not to use directive antennas for packet, because it causes HTS.

Of course the current Packet BBS uses a copper J-pole....which from my old antenna position couldn't be heard....but we could both hear the NODE. Sure was interesting when both our systems got busy. Fortunately or unfortunately he could hear me, while I couldn't hear him. Not as bad as a node that everybody can hear, but it couldn't hear anybody.

I'm using a copper J-pole right now....need to move it up 2 feet so the metal flashing in the roof makes less of an effect on the SWR.

Another guy I know uses a 12 element 2m yagi.

Our node used to use a 5 element 2m yagi....now its using a 210C4 clone (four bay omni).

--
--EMAIL----------PHONE----------FAX----------
| WORK: lawrence@combdyn.com | (403)529-2162 | (403)529-2516 | CallSign
| HOME: dreamer@lhaven.uumh.ab.ca | (403)526-6019 | (403)529-5102 | VE6LKC
---
disclamer = (working_for && !representing) + (Combustion Dynamics Ltd.);

894. Re: W3IWI paper #4: Concerning continent designators

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-25 22:32:41 UTC
From: dave@llondel.demon.co.uk
Message-ID: <754291961snx@llondel.demon.co.uk>
Source record: 51033

In article <19931125.111914.253@almaden.ibm.com> ENGE@almaden.ibm.com writes:
>Here is W3IWI,s original posting
>
[stuff deleted]
>Let me state at the outset that I'm not convinced that we need to use the
>continent field. It seems to me that the country field by itself is ade-
>quate and that the packet BBSes can easily keep track of all the countries
>in the world. Let me also state that many of the issues addressed here
>arise because of constant confusion between the functions of addressing
>and routing.
>
Some of us use continent designators because it makes things simpler.
All I need to know are the countries in EU (or should that be EURO?)
and the continent designators for everywhere else. Far easier than maintaining
a list of 300+ countries, although unfortunately it seems that most of the
'new' ones appearing at present are in EU and hence I have to know them
anyway :-(

Dave
--

****
* G4WRW @ GB7WRW.#41.GBR.EU AX25 * Start at the beginning. Go on *
* dave@llondel.demon.co.uk Internet * until the end. Then stop. *
* g4wrw@g4wrw.ampr.org Amprnet * (the king to the white rabbit) *
****

895. Re: Max BAUD on 6M AM & FM

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-26 02:23:18 UTC
From: bcoleman@hayes.com
Message-ID: <8449.2cf53056@hayes.com>
Source record: 51032

In article <1993Nov22.150859.22728@ke4zv.atl.ga.us>, gary@ke4zv.atl.ga.us (Gary Coffman) writes:
> In article <arog.753911447@BIX.com> arog@BIX.com (arog on BIX) writes:
>>
>>Now, how high a bps rate can be fit in six kc ?
>
> That's a tough question.

Actually, it is an easy question. The answer is infinity.

Of course, this requires a SNR of infinity as well.

There is no simple practical answer to the question. The ability to transfer information is limited by the product of bandwidth and signal to noise ratio. I refer you to Dr. Shannon's papers on information theory.

--
Bill Coleman, AA4LR ! CIS: 76067,2327 AppleLink: D1958
Principal Software Engineer ! Packet Radio: AA4LR @ W4QO
Hayes Microcomputer Products, Inc. ! UUCP: uunet!hayes!bcoleman
POB 105203 Atlanta, GA 30348 USA ! Internet: bcoleman%hayes@uunet.uu.net
Disclaimer: "My employer doesn't pay me to have opinions."
Quote: "The same light shines on vineyards that makes deserts." -Steve Hackett.

896. Land-mobile-radio mailing list started

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-26 14:27:22 UTC
From: david@stat.com
Message-ID: <B1LmDc3w165w@stat.com>
Source record: 50943

Welcome to the Land Mobile Radio Mailing List!

The purpose of this sig is to promote technical conversation regarding commercial land mobile two-way radio communications and associated systems and accessories. In addition to conversation buying, selling and trading of commercial land mobile equipment is allowed.

To Send Mail To Be Distributed To All Subscribers:

land-mobile-radio@stat.com

And Send Normal Subject And Text.

To Add Yourself To This List, Please Send Electronic Mail To:

listserv@stat.com

And Include The Command:

subscribe land-mobile-radio

As The First Line of Your Message.

To Remove Yourself From This Server, Please Send Electronic Mail To:

listserv@stat.com

And Include The Command:

Unsubscribe land-mobile-radio

As The First Line of Your Message.

Requests For Help Should Be Sent To:

land-mobile-radio-request@stat.com

Editor, HICNet Medical Newsletter
Internet: david@stat.com FAX: +1 (602) 451-6135
Bitnet : ATW1H@ASUACAD

897. Baycom & OS/2

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-26 17:40:19 UTC
From: weiss@maroon.tc.umn.edu
Message-ID: <weiss.754335619@maroon.tc.umn.edu>
Source record: 51034

Is it possible to run a Baycom-type modem as a DOS application under OS/2
using either the Baycom ax25 driver and baycom software or NOS?

Or is the interrupt activity way too high for a 385-25??

Not wanting to shell out $100 for a new TNC at 1200 baud I'd love to get the
Baycom to work, if possible.

Thanks for any experiences,

__jeffrey weiss n0irr

898. Re: AMSAT/Satellites

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-26 18:50:13 UTC
From: n4hy@snook.ccr-p.ida.org
Message-ID: <N4HY.93Nov26185013@snook.ccr-p.ida.org>
Source record: 51035

You are in rec.radio.amateur.digital.misc. I assume you can find
rec.radio.amateur.space. The stuff you want is there.

Bob
--
Robert W. McGwier | n4hy@ccr-p.ida.org Interests: ham radio,
Center for Communications Research | scouts, astronomy,and golf
Princeton, N.J. 08520 | ASM Troop 5700, ACM Pack 53 Hightstown
(609)-279-6240(v) (609)-924-3061(f)| I used to be a Buffalo . . . NE III-120

899. Re: Portable Packet Station with a HP 95LX ???

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-27 06:44:35 UTC
From: jwill@cabell.vcu.edu
Message-ID: <1993Nov27.064435.10814@cabell.vcu.edu>
Source record: 51037

I use the HP95LX/KPC-3/Alinco DJ580t setup. What I did was to order an "unterminated experimenters' cable" from Educalc for $16 and directly soldered the leads to the underside of the KPC-3 board after running the cable through a small hole and grommet in the lefthand back corner of the case. It works nicely and is neat and compact. Another Idea would be to buy the $50.00 Station95 docking station and build the TNC into the case. I am currently working on this idea: just looking for the right deal for a used Station95 and a beat-up HT that I can strip from its case and build into a monolithic packet station: just add 95LX.

Robert S. Williams, MD

900. Re: ATM on Amateur Radio?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-27 21:25:15 UTC
From: atkinson@itd.nrl.navy.mil
Message-ID: <CH6663.1u6@ra.nrl.navy.mil>
Source record: 51038

In article <2ctnrt$ocf@newsserv.cs.sunysb.edu> rick@cs.sunysb.edu (Rick Spanbauer) writes:

> You're confining yourself with how ATM might apply to
> existing amateur packet. Bandwidth allocation similar
> to ATM might make sense in a full duplex system where a
> hub would have to decide how to split up its forward
> channel bandwidth among the client nodes.
>
> Rick Spanbauer, WB2CFV

ATM/RF doesn't make much sense. We've been looking into it for
hypothetical use with Navy radios and very rapidly concluded that
ATM/RF lost big. If even one ATM cell has a bit error at the
receiver, the entire AAL frame has to be retransmitted. Consider that
IP/AAL5 uses 9180 as the MTU size, that there are 48 octets of user
data per 53 octet ATM cell, that the typical bit error rate of an RF
channel is high, and the bandwidth costs of solid ECC. By contrast,
IP/RF works reasonably well and is currently used by a large number of
non-commercial, commercial and government users.

A lower overhead and technically superior solution for bandwidth
reservation would be to use a resource reservation protocol
(e.g. RSVP, which is being proposed for use with IP). ATM doesn't
handle bandwidth reservation very effectively -- though the marketing
droids tout bandwidth reservation as an advantage.

ATM also has potentially severe problems with switch congestion and
cell loss. The main way that real ATM users are coping with this
switch problem is the traditional telco solution (over-engineer the
network big-time) and this is expensive to do.

In short, wise folks will soon understand that ATM is mostly hype at
this point, that it is NOT a panacea, and that it probably can't be
usefully extended very far outside its design objective (connecting
fiber optic circuits together for telephone companies and for high-
bandwidth fiber-optic computer communications circuits).

Ran
atkinson@itd.nrl.navy.mil
(who until very recently was working on ATM full-time)
employed by, but not speaking officially for the
Information Technology Division, Naval Research Laboratory...

901. Re: ATM on Amateur Radio?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-27 21:38:26 UTC
From: atkinson@itd.nrl.navy.mil
Message-ID: <CH66s3.268@ra.nrl.navy.mil>
Source record: 51039

In article <CH0n75.CM2@cunews.carleton.ca> im@hydra.CARLETON.CA (Ian McEachern VE3PFH) writes:

>First off there is nothing saying that Amateur Radio ATM will need
>26 Mbps, or anything on that order to do something usefull.

No, but the overhead due to ATM cell size and header structure is high. On top of that, one has ATM Adaptation Layer overhead (again not trivial) and then one has to have some way to format the user data. This WILL consume much more bandwidth than is taken up at present.

>The telco standards people are looking to map ATM cells onto T1
>carriers right now, and when that is done there is talk that
>they'll map ATM cells onto DS0's too!

None of which means that it makes any sense, particularly from a bandwidth perspective. IP/T3 has much more useful bandwidth than IP/ATM/T3. The same is true whether one has T3 or T1 or DS0 or some lower bandwidth.

>Secondly there could be some interesting benefits to a Ham implementation
>of ATM. Can you imagine a data standard that could pass both voice, data
>and video with appropriate handling?

IP can do this today over low-bandwidth channels. With the implementation and deployment of real-time flow support and resource reservation (e.g. as proposed in the RSVP protocol specification), it should be even better suited for this. Of course, ATM is much more sexy to talk about even if it isn't as good a solution technically...

>Expand your mind abit further and imagine an ATM switch on the Phase 4
>Ham satellite, to switch your packets quickly over to the beam
>on europe, to download the latest version of GRINOS, while simultaneously
>enjoying a ragchew with a group of VK's in the outback, through
>the beam pointed towards Auz.

ATM switches have real problems with cell loss and congestive collapse. The features that you describe all are a function of the bandwidth available much more than which link protocol (ATM is after all a kind of link/subnet protocol) is in use. ATM is a very high overhead approach to those problems. Running normal IP would be a much more appropriate solution.

>I think the big benefit of something like ATM will be integrating
>voice and data in the ham world!

IP can do this now with less bandwidth than ATM would require. The machines on my desk move audio, video, and data between three continents in real-time just fine, sharing bandwidth with ftp and telnet and smtp sessions. One can't do it very well at 9600 baud with ANY technology though. Compressed voice and full-motion video still require a whole lot of bandwidth by Ham standards.

ATM is mostly hype at this point, consider what the ATM specifications really say before claiming that ATM is a likely solution to any problem. In general, the Ham community garnered its good reputatioin by applying science to its problems. Let's keep up that tradition.

902. Re: Illegal Ham Radio - Internet gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-28 16:57:58 UTC
From: M.Willis@ee.surrey.ac.uk
Message-ID: <1993Nov28.165758.28265@ee.surrey.ac.uk>
Source record: 50940
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.policy

Look all this 3rd party stuff. As far as we in Europe are concerned it is totally illegal. I do not want any of my intermet mail to go to packet or I may end up in trouble. It has already happened once.

The concept is great, we could really use it but it is against our (CEPT) law. Therefore close these gateways or fix the problem by removing external links to non 3rd party statesbefore it becomes necessary to take other (legal) steps to protect our licences.

The whole 3rd party question is being looked at by our regulatory authority and we are hopeful there may be positive changes, but not as yet, so don't mess it up.

Mike

903. ATM on Amateur Radio?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-28 18:01:00 UTC
From: OSYSMAS@MVS.OAC.UCLA.EDU
Message-ID: <199311281802.KAA20528@ucsd.edu>
Source record: 50941

After reading Gigabit Networking by Craig Partridge, which includes ATM as one of the topics in high speed networking, I'm not convinced that ATM is even a good idea for fiber links.

ATM breaks packets up into cells, the idea being that an time critical (voice or video) packet can't affort to be held back because a long (4k bytes?) packet is being sent. So all packets are broken into cells, which can then be sent as needed (critical ones first).

Well, it appears that this solves the problem. Only on a 1Gbit link a 4K byte packets is only 32 microseconds long so the problem doesn't really exist for this speed link!

Also my understanding is that currently all you can get today on ATM is a permanent virtual circuit, no "dial up". It appears that switched service is years away. And it's not clear how (if?) ATM will handle multicast traffic.

Remember, ATM is brought to you by the same people who designed ISDN as the answer to local telephone service. Will it follow the same installation / availability / cost path?

If someone created some standard for bits on a fiber (speed, coding 8/10?, CRC), then PPP could be run on that. And IP on top. So it's only a hardware/standard problem and we could have 1G+ fiber links today... Doesn't this bypass all the ATM problems?

What does this have to do with Amateur Radio? Well, I've been thinking about all the claims that there isn't enough spectrum to do Gigabit networking via RF. Really? What about local and line of sight links in the 24Ghz to 100Ghz range? Sounds hard (a challange) today, but doesn't sounds like it will remain so...

904. MFJ1270B

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-28 21:47:07 UTC
From: doug.ferrell@exchange.tlh.fl.us
Message-ID: <9311282147.A6982wk@exchange.tlh.fl.us>
Source record: 50942

[No readable article body recovered]

905. HAM-server index file

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-29 00:44:59 UTC
From: HAMSinfo@GRAFex.sbay.org
Message-ID: <gate.754533899@GRAFex.sbay.org>
Source record: 50944
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc

```
Executed: Sun Nov 28 19:44:51 1993

NOTES: ----------------------------------------------------------------------

Mac Catch 22: .HQX files need to be de-binhexed. All others must be
uudecoded. Order UUTOOL.HQX for uudecode tool.

If you do not know how to use HAM-server, send email to
HAM-server@GRAFex.sbay.org. In the text, place HELP.

If you order a file and do not get it, check the index to be sure you have
spelled the filename correctly. If you have ordered the file correctly,
then order a new INDEX, as I may have moved the file to a different
directory. The system is still expanding, and I am trying to keep it in
managable chunks.

Also, if you have ordered files from HAM-server and do not receive them, it
might be because your return path is incorrect. My bounce mailbox fills up
quite regularly with bounce messages. And, since the path is incorrect, I
cannot contact you to let you know.

Orders must be sent to HAM-server. Orders sent to KA6ETB or HAMSinfo are
ignored. If you are reading this from usenet, do not respond to this post.
You must send email to HAM-server@GRAFex.sbay.org.

A new INDEX is automatically generated weekly and when files are moved or
added.

The archives may contain the same file under different names. If you should
run across one of these, please let me know with email to
KA6ETB@GRAFex.sbay.org

-------------------------------------------------------------------------------

Directory: /hamradio/

00-INDEX.TXT 10155 11-21-93

Directory: /hamradio/10meters/

10MBEACO.LST 6233 3-26-93

Directory: /hamradio/advanced/

ADV21.ZIP 103501 6-18-93
ADVANCED.FRQ 1275 8-15-91

Directory: /hamradio/antennas/
```

ANTENNAS.BAS 2227 3-26-93
ANTENNAS.TXT 7771 2-02-93
BUTERNUT.TXT 6106 3-26-93
CRPT2NTA.TXT 10713 2-02-93
DISCONE.TXT 1805 3-26-93
LOADPOLE.ZIP 7542 3-01-93
MININEC3.ZOO 164929 3-01-93
MOBILE.TXT 4458 3-26-93
PORTABLE.ANT 1735 5-26-93
YAGIMAX.ZIP 352305 3-01-93

Directory: /hamradio/arrl/

ARRLBBS.TXT 3153 3-03-93
ARRLDIGI.TXT 23303 2-02-93
ARRLINDX.TXT 17591 3-02-93
ARRLINFO.TXT 3321 2-02-93
ARRLJOB.TXT 18455 2-02-93
ARRLLOGO.PS 2911 2-02-93
ARRLPIO.TXT 116131 2-02-93
QSLBURO1.TXT 14440 2-02-93
QSLBURO2.TXT 10117 2-02-93

Directory: /hamradio/bandplan/

BANDPLAN.DOC 2528 3-24-92
PLAN129.TXT 1928 8-12-91
PLAN222.TXT 585 12-22-91
PLAN2M.TXT 522 8-12-91
PLAN440.TXT 572 8-12-91
PLAN6M.TXT 249 8-12-91
PLAN900.TXT 1108 8-12-91

Directory: /hamradio/callbook/

CALBK-WP.TXT 4064 8-17-92
CALLBOOK.C 18991 3-26-93
CLBK-ARY.TXT 1592 12-28-90
CLBK-EYH.TXT 1480 3-07-93
CLBK-INT.TXT 2280 3-06-93
CLBK-IYA.TXT 556 11-23-91

Directory: /hamradio/contests/

CONTEST.ARC 25065 3-01-93
CONTEST.ZIP 147989 3-01-93
CT626.ZIP 178372 3-01-93
UNIGRID2.BAS 12341 3-26-93
WHATSON.ARC 15826 3-01-93
WLOGDEMO.ZIP 163276 3-01-93
WRTLOG60.ZIP 836615 6-08-93

Directory: /hamradio/dx/

AUTOLOG4.ARC 165621 3-01-93
DXB20DMO.ZIP 129658 3-01-93
DXCC.ARC 10079 11-11-93
DXCC.LIS 15783 11-11-93
DXCC104.ARC 120117 3-01-93
DXCCK2DI.TXT 15904 2-02-93
DXCCTXT.Z 7080 11-11-93
DXLOCATE.LST 35911 3-26-93
DXLOG185.ZIP 171738 3-01-93
HAM_LOG.ZIP 94848 3-19-93
HFPROP.BAS 12300 3-26-93
LOGBOOK.ARC 104668 3-01-93
LOGBOOK.ZIP 83422 3-19-93
SLOVENIA.FRQ 4150 10-03-93

Directory: /hamradio/exams/

AUTOEXAM.ZIP 251630 3-01-93
EXAMCRDT.TXT 6490 2-02-93
EXAM_OPS.TXT 7431 2-02-93
HAMQUIZ.ZIP 101015 3-19-93
HAMSTACK.TXT 3439 2-02-93
HANDICAP.TXT 9632 2-02-93
VEFC24.ARC 26774 3-01-93

Directory: /hamradio/extra/

EXT21.ZIP 99672 6-18-93
EXTRA.FRQ 1157 8-25-91

Directory: /hamradio/general/

GEN012.ZOO 24160 6-18-93
GEN21.EXE 83879 3-19-93
GEN21.ZIP 72931 6-18-93
GENTEST.EXE 136865 1-11-92

Directory: /hamradio/help/

BCUMAHAM.TXT 5156 3-28-93
BITFTP.HLP 11347 5-09-93
ELMER100.ZIP 65425 3-01-93
ELMERS.DIR 46722 3-07-93
ELMRINFO.TXT 6984 2-02-93
ELMRLIST.TXT 46722 3-07-93
FAQ.TXT 9164 11-28-93

Directory: /hamradio/hf/

COMB6.ZIP 43190 3-01-93
GC103.ARC 23776 3-01-93
MICROMUF.BAS 4881 3-01-93
MICROMUF.PAS 7695 3-01-93
SOL_GEO.DAT 24836 2-02-93

SOL_TERA.TXT 27028 2-02-93

Directory: /hamradio/internet/

FTPSITES.TXT 3480 6-06-93
GATEWAYS.TXT 5785 2-02-93
HAMEMAIL.TXT 223537 2-02-93
MAILGATE.TXT 22734 11-18-93
NEWSGRPS.TXT 6917 2-02-93
RECINFO.TXT 9252 3-14-93
USNETSEL.TXT 8164 2-02-93

Directory: /hamradio/macstuff/exams/

ADVANCED.SIT 133986 4-11-93
EXTRA.SIT 128944 4-11-93
GENERAL.SIT 97148 4-11-93
NOVICE.SIT 121453 4-11-93
TECH.SIT 107031 4-11-93
TSTADVAN.HQX 536625 11-11-93
TSTEXTRA.HQX 476347 11-11-93
TSTGEN.HQX 320149 11-11-93
TSTNOV.HQX 409007 11-11-93
TSTTECH.HQX 341519 11-11-93

Directory: /hamradio/macstuff/misc/

FRQVALET.HQX 114671 11-21-93
MACSOFT.TXT 28948 11-21-93

Directory: /hamradio/macstuff/morse/

CODE1_0.HQX 44302 11-11-93
CODETUTR.HQX 23957 11-11-93
MAC525_1.HQX 89968 8-17-93
MAC535.HQX 122083 8-17-93
MANIA.HQX 48803 11-11-93
MASTER.HQX 58146 11-11-93
MCMORSIT.HQX 78187 11-21-93
MORSE.MAC 263 3-02-91
MORSE.HQX 16369 11-11-93
MORSE1_1.HQX 16568 11-11-93
TRAINER.HQX 121407 11-11-93

Directory: /hamradio/macstuff/packet/

SAVANTDM.HQX 178005 8-17-93
SAVNTUPD.HQX 80757 8-17-93

Directory: /hamradio/macstuff/tcpip/

SOFTKISS.HQX 145274 8-17-93

Directory: /hamradio/macstuff/tcpip/mac-nos/

CONFIG.HQX 424 9-27-93
IM10B27N.HQX 483 9-27-93
NET2325.CPT 198493 9-27-93
NET2325.HQX 325 9-27-93
NET2326.CPT 198431 9-27-93
NET2326.HQX 330 9-27-93
NOSINTRO.MSW 69121 4-23-92
TCP_IP.SIT 172688 9-27-93

Directory: /hamradio/macstuff/utility/

CPTXPAND.HQX 18256 11-21-93
DEARJ.SIT 14776 11-18-93
MACGZIP.CPT 140672 11-18-93
STUFLITE.BIN 465987 11-18-93
UUTOOL.HQX 76605 11-18-93

Directory: /hamradio/misc/

9PN-25PN.TXT 676 3-27-93
AUTOLOG.ZIP 109886 3-19-93
BATTRIES.TXT 9694 2-02-93
BBS_LIST.TXT 41800 2-28-93
BEACONS.INF 2284 7-29-92
CA-PHONE.BBS 1338 11-06-92
CHART.C 1999 3-26-93
CHURCVR.TAR 491520 8-04-93
CONDOR.INF 2870 9-26-92
CONDORMP.TXT 3486 7-16-89
EASYLOGR.ZIP 228482 3-19-93
ELMER.INF 9129 11-21-93
ELMER.LST 53132 11-21-93
FCC-PRB1.TXT 25754 4-05-93
FIELDDAY.EXE 239510 11-11-93
FLNTALAW.TXT 3528 2-02-93
HAMPLTES.TXT 5507 2-02-93
HAM_READ.ARC 1366 3-19-93
K1EA-619.EXE 315212 3-19-93
K2UYH.ARC 108510 3-19-93
LOGOS.PS 9258 2-02-93
MAILORDR.TXT 20383 2-02-93
MAP.ZIP 802214 3-19-93
MARS.FRQ 987 8-28-93
NICADS.INF 6533 3-26-93
PRO-2004.MOD 4418 3-26-93
PRO-2004.REV 18797 3-26-93
QSLCARD1.PS 27337 3-26-93
QSLCARD2.PS 6399 3-26-93
RFI.TXT 1991 3-17-93
RFI001.TXT 2158 6-08-89
RFI002.TXT 1815 6-08-89
RFI003.TXT 3288 6-08-89

RFI_TIPS.TXT 5948 2-02-93
SCANNER.MOD 5287 3-26-93
SMITHCHA.PS 23664 3-26-93
UC-U2AT.REV 7239 3-26-93
VHFPROP.BAS 24498 3-26-93

Directory: /hamradio/mods/

2ETO2AT.MOD 1443 8-07-93
56KBFIX.MOD 1093 5-26-93
741AMODS.ZIP 8974 5-26-93
760XLT.MOD 490 5-26-93
ALLBAND.MOD 2870 5-26-93
ALR22T.MOD 2152 5-26-93
BC205XLT.MOD 4221 5-26-93
DJ-580 155310 5-26-93
DJ500.MOD 2885 5-26-93
DR510.MOD 4186 5-26-93
FRQSGALR.ZIP 206290 5-26-93
FT-530.MOD 2302 8-07-93
FT101E.MOD 2639 5-26-93
FT209RH.MOD 1034 5-26-93
FT212RH.MOD 1345 5-26-93
FT23R.MOD 776 5-26-93
FT411.MOD 4824 5-26-93
FT411-2.MOD 1026 5-26-93
FT470-2.MOD 9942 5-26-93
FT470-3.MOD 1951 5-26-93
FT4700.MOD 1195 5-26-93
FT727CAT.MOD 2520 5-26-93
FT727R.MOD 1071 5-26-93
FT747GX.MOD 1221 5-26-93
FT767GX.MOD 1452 5-26-93
HT-24-T.MOD 3581 7-24-93
IC-24.MOD 2071 5-26-93
IC-MU2.MOD 1186 5-26-93
IC02.MOD 2082 5-26-93
IC02-2.MOD 1231 5-26-93
IC02-3.MOD 861 5-26-93
IC04.MOD 1897 5-26-93
IC24-2.MOD 993 5-26-93
IC24-3.MOD 5387 5-26-93
IC2410.MOD 4437 5-26-93
IC28.MOD 479 5-26-93
IC2SAT.MOD 4994 5-26-93
IC2SAT-2.MOD 8131 5-26-93
IC32.MOD 2501 5-26-93
IC32-2.MOD 2719 5-26-93
IC3200A.MOD 452 5-26-93
IC37.MOD 3900 5-26-93
IC735IBM.MOD 1407 5-26-93

IC900.MOD 2945 5-26-93
ICOM32AT.MOD 1937 5-26-93
ICOM735.1 3614 5-26-93
ICOM735.2 1380 5-26-93
ICOM735- 3614 5-26-93
ICW2A.MOD 13392 5-26-93
KAMDCD.MOD 2048 5-26-93
KENWD930.MOD 6640 5-26-93
NOAASTNS.ZIP 20995 5-26-93
PK232LOK.MOD 1858 5-26-93
PORTABLE.ANT 1735 5-26-93
PRO2004.MOD 5157 5-26-93
PRO2005.MOD 2602 5-26-93
PRO2006.MOD 3119 5-26-93
PRO2020.MOD 4775 5-26-93
PRO34.MOD 1239 5-26-93
R7000.MOD 3404 5-26-93
R7000-2.MOD 26880 5-26-93
RADIO.MOD 4915 5-26-93
RDIOMODS.SRV 956 5-26-93
TC2DUPLX.MOD 1581 5-26-93
TH-215A.MOD 2174 3-26-93
TH215 2072 5-26-93
TH215.MOD 2227 5-26-93
TH225.MOD 2932 5-26-93
TH25.MOD 7811 5-26-93
TH27A 6725 5-26-93
TH28A 2608 5-26-93
TH75.MOD 1385 5-26-93
TINY2TNC.MOD 1431 5-26-93
TM-721A.MOD 4867 3-26-93
TM-741-M 17526 5-26-93
TM2570A.MOD 778 5-26-93
TM321A.MOD 600 5-26-93
TM321A-2.MOD 957 5-26-93
TM321A-3.MOD 1415 5-26-93
TM421A.MOD 1836 5-26-93
TM701.MOD 2979 5-26-93
TM701A.MOD 280 5-26-93
TM721.MOD 4228 5-26-93
TM721-2.MOD 2784 5-26-93
TM721-3.MOD 6073 5-26-93
TM721A 13389 5-26-93
TM731.MOD 1612 5-26-93
TM741.MOD 1230 5-26-93
TM941A-2.MOD 2723 5-26-93
TNC2.MOD 1589 5-26-93
TNC2A.MOD 3329 5-26-93
TS-930S.MOD 2226 3-26-93
TS140.MOD 563 5-26-93

TS430.MOD 825 5-26-93
TS430-2.MOD 844 5-26-93
TS430MOD.DOC 2719 3-26-93
TS430S.REV 5066 3-26-93
TS440.MOD 1589 5-26-93
TS440-AT.MOD 971 5-26-93
TS440S.INT 9986 3-26-93
TS680.MOD 514 5-26-93
TS680-2.MOD 2940 5-26-93
TS711.MOD 123 5-26-93
TS790A.MOD 5059 5-26-93
TS850-1.MOD 12088 5-26-93
TS850-2.MOD 9086 5-26-93
TS930.MOD 6931 5-26-93
TS940IBM.MOD 2539 5-26-93
U2AT.MOD 3161 5-26-93
UNI2510.MOD 1622 5-26-93
W21AT.MOD 4330 10-10-93

Directory: /hamradio/morse/

AUTOCW.ARC 60849 3-01-93
CODETEST.HIN 7287 3-26-93
CW.ARC 62536 3-01-93
CW104.ZIP 83367 3-01-93
CWDEMO.ZIP 573318 11-11-93
FFTMORSE.ZIP 27344 3-01-93
HAMCOM21.ZIP 182531 3-01-93
MACHINE.ARC 13061 3-01-93
MOR21.ZIP 53013 6-18-93
MORSE.BAS 5661 3-01-93
MORSE30B.ZIP 71113 3-01-93
MORSETST.BAS 7179 3-01-93
PROCW.ZIP 24227 3-01-93
ROBOCOPY.ZIP 27346 3-01-93
SM316.ZIP 109484 3-01-93
SUPERIOR.SHR 99149 11-25-93

Directory: /hamradio/mswin/

DSP2D_UP.ZIP 26368 11-11-93
GMAIL.TXT 110 11-11-93
GMAIL.ZIP 78712 11-11-93
ICMPCMD.ZIP 3294 11-11-93
MSWINNOS.ZIP 4014 11-11-93
NETSORT.ZIP 1505 11-11-93
QVTNET23.ZIP 212649 11-11-93
RTSORT.ZIP 8192 11-11-93

Directory: /hamradio/newfiles/

AMPR.ORG 409718 7-06-93
FRQSGALR.ZIP 206290 5-26-93
NETAMSRC.ARC 56320 9-29-93
NETMAC52.SIT 178633 9-29-93
NETMAC55.SIT 179770 9-29-93
NET_AMIG.ARC 108322 9-29-93
NET_BM.ARC 37772 9-29-93
NET_DES.ARC 26249 9-29-93
NET_DOC.ARC 143194 9-29-93
NET_EW.ARC 115955 9-29-93
NET_MAC.HQX 223461 9-29-93
NET_READ.ME 2443 9-29-93
NOAASTNS.ZIP 20995 5-26-93
NOS_KIT.DOC 4313 11-05-93
NOS_KIT.ZIP 659372 11-05-93
NTEX_MS.ARC 118873 3-19-93
PCECAP.ZIP 100174 3-19-93
TEC20.ZIP 88796 3-19-93
TEC21.EXE 95783 3-19-93
TRAVINFO.LST 38204 3-26-93
TUNEUP.TNC 2557 7-03-91
UC-U2AT.REV 7239 3-26-93
WIRETAP.TXT 32215 3-26-93

Directory: /hamradio/novice/

NOV21.EXE 106365 3-19-93
NOVICE25.ARC 50049 3-01-93
NOV_TEST.ZIP 95588 3-01-93

Directory: /hamradio/nts/

3RDPARTY.LST 1802 9-09-91
CANADA.ADR 375 2-14-90
COUNTRY.ADR 2975 11-25-91
NTS12.ZIP 93145 6-18-93
NTSDISK.EXE 37401 11-20-91
RGRAM27.ZIP 48027 3-19-93
ZIPKEY.ZIP 198368 11-11-93

Directory: /hamradio/os2/

OS2NOSV4.ZIP 262476 11-11-93
OS2PMAIL.ZIP 36178 11-11-93
OS2SPEED.ZIP 2050 11-11-93
PMNOS1DS.ZIP 843122 11-11-93
PMNOS1DX.ZIP 377128 11-11-93

Directory: /hamradio/packet/

9600BAUD.PKT 8154 3-06-91
A802MANP.TXT 35627 8-10-93
AMTORFRQ.TXT 9158 10-13-93
ARYGATE.TXT 10286 4-11-93

```
AUTOBPQ.ZIP 92993 9-04-93
AX25SPEC.TXT 66235 3-30-93
BBSTIP01.TXT 1435 1-04-91
BBSTIP02.TXT 1868 1-04-91
BBSTIP03.TXT 1869 1-04-91
BBSTIP04.TXT 2032 1-04-91
BBSTIP05.TXT 2196 1-04-91
BBSTIP06.TXT 1132 1-04-91
BBSTIP07.TXT 1180 1-04-91
BBSTIP08.TXT 863 1-04-91
BBSTIP09.TXT 2260 1-04-91
BBSTIP10.TXT 1325 1-04-91
BBSTIP11.TXT 1755 1-04-91
BBSTIP12.TXT 2222 1-04-91
BBSTIP13.TXT 2305 1-04-91
CATEGORY.LST 3477 1-26-92
CHEAPPKT.TXT 4258 3-30-93
FAQ.TXT 33570 3-08-93
FAQ_PAKT.TXT 29942 2-02-93
HFBBS.TXT 19833 10-13-93
HFHINTS.TXT 3020 4-05-90
HI-SPEED.NET 15864 8-07-93
HIERADR.DOC 4849 6-15-90
INFOPAKT.TXT 39574 2-02-93
KAM401.ARC 156061 3-01-93
NEXTGEN.BBS 3948 3-21-93
PKTINFO1.TXT 2891 2-20-93
PKTINFO2.TXT 6338 2-02-93
ROUTING.TXT 28069 3-26-93
RTTY12G.ARC 126651 3-01-93
SETTINGS.TNC 1089 7-03-91
TTY37.ARC 36600 3-01-93
WP.DOC 1507 5-09-93
XPCOM131.ZIP 403741 5-29-93

Directory: /hamradio/packet/loz/

00-INDEX.TXT 2446 4-19-93
PACKET01.LOZ 3746 3-03-93
PACKET02.LOZ 9436 3-04-93
PACKET03.LOZ 6675 3-07-93
PACKET04.LOZ 7372 3-10-93
PACKET05.LOZ 6155 3-17-93
PACKET06.LOZ 15037 3-23-93
PACKET07.LOZ 5707 5-11-92
PACKET08.LOZ 6715 5-12-92
PACKET09.LOZ 4578 5-12-92
PACKET10.LOZ 8698 1-31-93
PACKET11.LOZ 6493 1-31-93
PACKET12.LOZ 5881 5-13-92
PACKET13.LOZ 6285 5-29-92
```

PACKET14.LOZ 7157 5-13-92
PACKET15.LOZ 4714 5-14-92
PACKET16.LOZ 3396 5-14-92
PACKET17.LOZ 4683 5-14-92
PACKET18.LOZ 2168 5-14-92
PACKET19.LOZ 4902 5-15-92
PACKET20.LOZ 7564 5-15-92
PKTINF01.TXT 4109 7-22-91
PKTINF02.TXT 6580 7-28-91
PKTINF03.TXT 4555 8-06-91
PKTINF04.TXT 3806 8-12-91
PKTINF05.TXT 4484 8-21-91
PKTINF06.TXT 4192 9-03-91
PKTINF07.TXT 4885 9-09-91
PKTINF08.TXT 4676 9-17-91
PKTINF09.TXT 3938 10-01-91
PKTINF10.TXT 2786 10-28-91
PKTINF11.TXT 3412 11-12-91
PKTINF12.TXT 7717 11-26-91
PKTINF13.TXT 2480 12-17-91
PKTINF14.TXT 2499 1-06-92
PKTINF15.TXT 2975 1-06-92
PKTINF16.TXT 1646 1-14-92

Directory: /hamradio/packet/software/

APL700.EXE 412928 8-26-93
FE.ZIP 16626 7-14-93
GP.DOC 125349 7-24-93
GP-1X50.ZIP 370518 7-06-93
LLINK220.ZIP 375144 11-21-93
PAX285.ZIP 15395 7-14-93
PCT214.ZIP 378739 3-01-93
PKGOL624.ZIP 323067 3-26-93
PKTSFTWR.TXT 4185 2-02-93
RTTY12G.ARC 126651 3-01-93
SELCAL11.ZIP 12590 3-01-93
TTY37.ARC 36600 3-01-93
XPCOM131.ZIP 403741 5-17-93

Directory: /hamradio/packet/software/aa4re/

AA4REBBS.INF 2654 4-11-93
AA4REBBS.ZIP 357277 3-19-93
B21TANSI.ZIP 3620 5-26-93
BB21HC.ZIP 259837 5-26-93
BB21HL.ZIP 110380 5-26-93
BB21HN.ZIP 358648 5-26-93
BB21HP.ZIP 239199 5-26-93
DOC211.ZIP 99644 5-26-93
HH21H.INF 1377 5-26-93

MBB35SRC.ZIP 72475 5-26-93
MBBIOS35.ZIP 29299 5-26-93
MBBIOS38.ZIP 39704 5-26-93
WATCHDOG.ZIP 8425 5-26-93

Directory: /hamradio/packet/software/dsp/

DOC.ZIP 301000 9-02-93
DSP105.ZIP 46817 9-02-93
DSP4SCHE.ZIP 238499 9-02-93
DSPTIPUP.ZIP 21417 9-02-93
SOURCE.ZIP 671625 9-02-93

Directory: /hamradio/packet/software/g8bpq/

BPQ405E.ZIP 143360 5-26-93
BPQ406.ZIP 170880 5-26-93
BPQ406A.ZIP 20216 5-26-93
BPQ406E.ZIP 181926 5-26-93
RSWD0330.ZIP 66213 5-26-93
RZSW30.ZIP 97411 5-26-93
TFPCX.ZIP 34817 5-26-93

Directory: /hamradio/packet/software/thebox/

BOOTARC.EXE 243874 7-19-93
INSTALL.BAT 174 7-19-93
NOS_1229.EXE 203295 7-06-93
NOS_1229.LP 172009 7-06-93
NOS_1229.MAN 221639 7-06-93
NOS_1229.MAP 75531 7-06-93
NOS_1229.NR 168281 7-06-93
NOS_1229.VER 52 7-06-93
SOURCARC.EXE 131999 7-19-93
SYSARC.EXE 105377 7-19-93
SYSOP15.ENG 65121 7-19-93
UPDATE.BAT 1354 7-19-93

Directory: /hamradio/packet/software/thenet/

THENET.FLA 6498 7-19-93
THENET.INF 4005 7-19-93
THENET.PAR 3692 7-19-93
TNET-X1G.TXT 68 7-19-93
TNET-X1G.ZIP 119680 7-19-93
TNET-X1H.ZIP 123904 7-19-93
TNET-X1J.EXE 218857 11-11-93
TNET-X1J.TXT 280 11-21-93
TNET-X1J.ZIP 335650 11-11-93
X1JDEV.EXE 116275 11-11-93

Directory: /hamradio/packet/software/f6fbb/

FBB515.ZIP 991152 7-30-93
TPK181.ZIP 579533 7-30-93

Directory: /hamradio/packet/software/wa7mbl/

OIZ-UTIL.ARC 64062 7-30-93
REQDIR.ARC 34438 7-30-93

Directory: /hamradio/packet/software/wa8ded/

TNCDED.DOC 29130 7-30-93
TNCDED.HEX 45068 7-30-93
TNCDED.MSG 4116 7-30-93
WA8DED 1004 7-30-93
WA8DED.DOC 14790 7-30-93
WA8DED.ROM 19284 7-30-93

Directory: /hamradio/packet/tcpip/

00-INDEX.TXT 1602 6-08-93
AMPR.ORG 409718 7-06-93
AMPRHOST 303457 7-06-93
AMPRINFO.TXT 5603 2-02-93
AMPRXORG.REV 516969 7-06-93
ASMOBJ.MSG 607 6-08-93
ASMOBJ.ZIP 6766 6-08-93
BMEXE332.ZIP 30898 6-08-93
BMSRC_ST.ARC 25334 8-07-93
CONNEX.Z 12030 7-06-93
E920603.ZIP 189423 6-08-93
EXPIRY.ZIP 53196 6-08-93
HELP_V02.ZIP 11984 7-06-93
INTRONOS.ZIP 54272 7-06-93
MAN-9106.ZIP 57169 6-08-93
NAN24HYC.ZIP 42635 6-08-93
PCNET.EXE 227498 4-26-92
PKTDRVR.INF 157 6-08-93
S920603.ZIP 656302 6-08-93
SATTRACK.ZIP 34886 7-06-93
SLFP123.ZIP 30476 6-08-93
TCPIP.INF 5818 6-02-93
VIEW9206.ZIP 384591 6-08-93

Directory: /hamradio/packet/tcpip/bm/

BM.DOC 16641 9-02-93
BM332C.TXT 235 9-02-93
BM332C.ZIP 52889 9-02-93
BMEXE.ARC 38547 9-02-93
BMH02.TXT 790 9-02-93
BMH02EXE.ZIP 300305 9-02-93
BMH02SRC.ZIP 60096 9-02-93
BMUTIL.ZIP 11546 9-02-93
VIEW0207.ZIP 320436 9-02-93

Directory: /hamradio/packet/tcpip/docs/

BEGIN.DOC 110255 2-07-91
FAQ-1292 75121 7-06-93
INTRONOS.ZIP 54272 7-06-93
KA9QBGN.ZIP 190366 6-08-93
KA9QNOS.NR 141577 7-06-93
KA9QNOS.PS 133704 7-06-93
NETNIX.PS 286542 7-06-93
NOSBGNLP.ZIP 57488 7-06-93
NOSBGNPS.ZIP 137021 7-06-93
RSPF22P.TXT 85164 7-06-93
TAPR92.TXT 72334 7-06-93
TAPR9600.MOD 11209 7-06-93
TDMA.TXT 12713 7-06-93
USERMAN.ZIP 112344 7-06-93

Directory: /hamradio/packet/tcpip/g1emm/

G1EMMKIT.EXE 168079 7-06-93
G1EMMKIT.ZIP 213973 7-06-93
KH113016.EXE 193643 7-06-93
KH113016.ZIP 593938 7-06-93
PCELM21.ZIP 116682 7-06-93
READ.ME 1077 7-06-93
SMALLEMM.EXE 134945 7-06-93

Directory: /hamradio/packet/tcpip/gpsnos/

GPSC1DOC.ZIP 38361 7-30-93
GPSC1EXE.ZIP 162104 7-30-93
GPSC1HLP.ZIP 13415 7-30-93
GPSC1SRC.ZIP 638737 7-30-93

Directory: /hamradio/packet/tcpip/gracilus/

GCALLBK.TXT 440 7-06-93
GCALLBK.ZIP 13914 7-06-93
GRAC20M2.ZIP 539910 7-06-93
P10DVR.TXT 824 7-06-93
P10DVR.ZIP 25230 7-06-93
P10R30E.TXT 29184 7-06-93
P10R30E.ZIP 291851 7-06-93
TWINDV21.ZIP 38656 7-06-93

Directory: /hamradio/packet/tcpip/nos/

KIT_SRC.TXT 4191 11-05-93
KIT_SRC.ZIP 39567 11-05-93
NOS-SLFP.ZIP 310211 6-08-93
NOSVIEW.ZIP 1764 7-06-93
NOSVW304.ZIP 682322 7-06-93
ROSE-NOS.ZIP 18050 7-06-93

Directory: /hamradio/packet/tcpip/nos-kit/

KIT_SRC.TXT 4191 10-27-93
KIT_SRC.ZIP 39567 10-27-93
NOS_KIT.DOC 4313 10-27-93
NOS_KIT.ZIP 659372 10-27-93

Directory: /hamradio/packet/tcpip/pa0gri/

GR-BUGS.BEE 5120 7-06-93
GR-NOTES.BEE 19584 7-06-93
GRIBEE08.ZIP 831616 7-06-93
GRNOS08.ZIP 268800 7-06-93
GRNOS08S.ZIP 257408 7-06-93
NOS_1229.DOC 172009 7-06-93
NOS_1229.EXE 203295 7-06-93
NOS_1229.MAN 221639 7-06-93
NOS_1229.MAP 75531 7-06-93
NOS_1229.ROF 168281 7-06-93
NOS_1229.VER 52 7-06-93
NOS_1229.ZIP 821866 7-06-93
RSPF0826.TXT 294 7-06-93
RSPF0826.ZIP 53695 7-06-93

Directory: /hamradio/packet/tcpip/pe1chl/

920420.DIR 6353 7-06-93
920420LT.ARC 175565 7-06-93
920420MT.ARC 111710 7-06-93
920420TC.ARC 153934 7-06-93
920420TP.ARC 104054 7-06-93
920420TS.ARC 113244 7-06-93
AUTOEXEC.DRS 2321 7-06-93
HISTORY.ARC 48620 7-06-93
NETDOC1.ARC 16485 7-06-93
NETDOC2.ARC 44672 7-06-93
PACSAT.ARC 87474 7-06-93
PB920430.ZIP 131138 7-06-93
PE1CHL.NET 417 7-06-93
README.CHL 384 7-06-93
SCCPRIN5.ARC 159020 7-06-93

Directory: /hamradio/packet/tcpip/wg7j/

JNOS107B.EXE 283045 7-06-93
JNOS107B.ZIP 987123 7-06-93
WG7JDOC.ZIP 46266 7-06-93

Directory: /hamradio/rigs/

COMPICOM.TXT 15707 3-26-93
FRGLOD10.ZIP 14451 4-01-93
HF_RIGS.TXT 4317 2-02-93
HT_INFO.TXT 10990 2-02-93

IC-12AT.REV 6682 3-26-93
IC-32AT.MOD 2715 3-26-93
IC02A.MOD 2424 3-26-93
IC02ATR.MOD 3294 3-26-93
IC28H.REV 6855 3-26-93
ICOM.C 9232 3-14-93
ICOM-110.C 9842 3-26-93
ICOMCI-V.CMD 7443 3-26-93
INFOEQPT.TXT 10063 2-02-93
KENWD930.MOD 6640 3-26-93
MNUFCTRS.TXT 5051 2-02-93
QST_REVW.TXT 41097 2-02-93
R7000.HIN 26430 3-26-93

Directory: /hamradio/satelite/

DOVE3W13.ZIP 43150 3-01-93
ELETRANS.C 2176 3-26-93
GEOSAT20.ZIP 56405 3-01-93
HAM_SAT.TXT 10967 2-02-93
ORBIT23.ARC 36852 3-01-93
PROTOCOL.1 39022 6-19-89
PROTOCOL.2 2157 6-19-89
QUICKS24.ZIP 77120 3-01-93
SATELITE.BAS 5642 3-01-93
SATELITE.HOW 18571 3-26-93
SATTAIM.ARC 1860 3-01-93
SATTRACK.INF 5017 3-26-93
SATTRACK.ZIP 34886 11-11-93
TRAK280.ZIP 346847 3-01-93
USAT92B2.ZIP 86782 3-01-93
WU120EXE.ZIP 222368 3-01-93

Directory: /hamradio/satelite/arsene/

ARSENE.TXT 1968 7-19-93
TELEM14G.ZIP 29363 7-19-93
TELEM14H.ZIP 29447 7-19-93
TELEMENG.ZIP 39938 7-19-93
TELEMFRA.ZIP 40680 7-19-93

Directory: /hamradio/sstvfax/

AUTOFAX.ARC 12452 3-01-93
FFT.COM 52096 2-02-93
FFTH.COM 53760 2-02-93
JVFAX50.ZIP 407934 3-01-93
SSTVFAX2.ZIP 28323 3-01-93
SSTVWFAX.TXT 37309 2-02-93
WEFAX.ARC 35968 3-01-93
WXRDR22.ARC 98944 3-01-93

Directory: /hamradio/swl/

FAQ_SWL.TXT 21936 2-02-93
SWL114.ZIP 302908 3-01-93
SWL_INFO.TXT 20666 2-02-93

Directory: /hamradio/technici/

TEC22.ZIP 74516 6-18-93
TECHTEST.EXE 148542 1-11-92

Directory: /hamradio/utility/

ARJ230NG.EXE 200704 6-18-93
ARJ241A.EXE 223856 8-07-93
BOOZ.ZIP 12639 6-18-93
COMP16.ZIP 16102 6-18-93
COMP430D.ZIP 20241 6-18-93
FILTER11.ARC 55936 3-01-93
INTMOD60.ARC 11902 3-01-93
JLEM.ZIP 14846 2-02-93
OHMSLAW.ARC 22197 3-01-93
PDZIP.ZIP 63473 6-18-93
PKUNZIP.EXE 23528 3-15-90
PKUNZIP2.EXE 28806 5-17-93
QEXTRACT.ZIP 43123 6-18-93
RC85PR15.ZIP 50983 3-01-93
RFTOOLS.ARC 144799 3-01-93
UNARJ230.ZIP 39074 6-18-93
UNZIP.EXE 26838 6-18-93
UNZIP41.ARC 121470 6-18-93
UNZIP41.EXE 21933 6-18-93
UUDECODE.BAS 5709 3-28-93
UUDECODE.C 5565 3-28-93
UUDECODE.DOC 519 3-28-93
UUDECODE.DBG 4658 11-21-93
UUEXE521.ZIP 32455 8-24-93
WHERITIS.ARC 30943 3-01-93
ZIP.EXE 59260 6-18-93
ZIP10EX.ZIP 158335 6-18-93
ZOO210.EXE 55721 6-18-93

Directory: /hamradio/vlf/

1750MTR.TXT 6532 2-02-93

906. HAM-server index file

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-29 01:16:16 UTC
From: HAMSinfo@GRAFex.sbay.org
Message-ID: <gate.754535776@GRAFex.sbay.org>
Source record: 50945
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc

```
Executed: Sun Nov 28 20:16:07 1993

NOTES: ----------------------------------------------------------------------

Mac Catch 22: .HQX files need to be de-binhexed. All others must be
uudecoded. Order UUTOOL.HQX for uudecode tool.

If you do not know how to use HAM-server, send email to
HAM-server@GRAFex.sbay.org. In the text, place HELP.

If you order a file and do not get it, check the index to be sure you have
spelled the filename correctly. If you have ordered the file correctly,
then order a new INDEX, as I may have moved the file to a different
directory. The system is still expanding, and I am trying to keep it in
managable chunks.

Also, if you have ordered files from HAM-server and do not receive them, it
might be because your return path is incorrect. My bounce mailbox fills up
quite regularly with bounce messages. And, since the path is incorrect, I
cannot contact you to let you know.

Orders must be sent to HAM-server. Orders sent to KA6ETB or HAMSinfo are
ignored. If you are reading this from usenet, do not respond to this post.
You must send email to HAM-server@GRAFex.sbay.org.

A new INDEX is automatically generated weekly and when files are moved or
added.

The archives may contain the same file under different names. If you should
run across one of these, please let me know with email to
KA6ETB@GRAFex.sbay.org

-------------------------------------------------------------------------------

Directory: /hamradio/

00-INDEX.TXT 10155 11-21-93

Directory: /hamradio/10meters/

10MBEACO.LST 6233 3-26-93

Directory: /hamradio/advanced/

ADV21.ZIP 103501 6-18-93
ADVANCED.FRQ 1275 8-15-91

Directory: /hamradio/antennas/
```

ANTENNAS.BAS 2227 3-26-93
ANTENNAS.TXT 7771 2-02-93
BUTERNUT.TXT 6106 3-26-93
CRPT2NTA.TXT 10713 2-02-93
DISCONE.TXT 1805 3-26-93
LOADPOLE.ZIP 7542 3-01-93
MININEC3.ZOO 164929 3-01-93
MOBILE.TXT 4458 3-26-93
PORTABLE.ANT 1735 5-26-93
YAGIMAX.ZIP 352305 3-01-93

Directory: /hamradio/arrl/

ARRLBBS.TXT 3153 3-03-93
ARRLDIGI.TXT 23303 2-02-93
ARRLINDX.TXT 17591 3-02-93
ARRLINFO.TXT 3321 2-02-93
ARRLJOB.TXT 18455 2-02-93
ARRLLOGO.PS 2911 2-02-93
ARRLPIO.TXT 116131 2-02-93
QSLBURO1.TXT 14440 2-02-93
QSLBURO2.TXT 10117 2-02-93

Directory: /hamradio/bandplan/

BANDPLAN.DOC 2528 3-24-92
PLAN129.TXT 1928 8-12-91
PLAN222.TXT 585 12-22-91
PLAN2M.TXT 522 8-12-91
PLAN440.TXT 572 8-12-91
PLAN6M.TXT 249 8-12-91
PLAN900.TXT 1108 8-12-91

Directory: /hamradio/callbook/

CALBK-WP.TXT 4064 8-17-92
CALLBOOK.C 18991 3-26-93
CLBK-ARY.TXT 1592 12-28-90
CLBK-EYH.TXT 1480 3-07-93
CLBK-INT.TXT 2280 3-06-93
CLBK-IYA.TXT 556 11-23-91

Directory: /hamradio/contests/

CONTEST.ARC 25065 3-01-93
CONTEST.ZIP 147989 3-01-93
CT626.ZIP 178372 3-01-93
UNIGRID2.BAS 12341 3-26-93
WHATSON.ARC 15826 3-01-93
WLOGDEMO.ZIP 163276 3-01-93
WRTLOG60.ZIP 836615 6-08-93

Directory: /hamradio/dx/

AUTOLOG4.ARC 165621 3-01-93
DXB20DMO.ZIP 129658 3-01-93
DXCC.ARC 10079 11-11-93
DXCC.LIS 15783 11-11-93
DXCC104.ARC 120117 3-01-93
DXCCK2DI.TXT 15904 2-02-93
DXCCTXT.Z 7080 11-11-93
DXLOCATE.LST 35911 3-26-93
DXLOG185.ZIP 171738 3-01-93
HAM_LOG.ZIP 94848 3-19-93
HFPROP.BAS 12300 3-26-93
LOGBOOK.ARC 104668 3-01-93
LOGBOOK.ZIP 83422 3-19-93
SLOVENIA.FRQ 4150 10-03-93

Directory: /hamradio/exams/

AUTOEXAM.ZIP 251630 3-01-93
EXAMCRDT.TXT 6490 2-02-93
EXAM_OPS.TXT 7431 2-02-93
HAMQUIZ.ZIP 101015 3-19-93
HAMSTACK.TXT 3439 2-02-93
HANDICAP.TXT 9632 2-02-93
VEFC24.ARC 26774 3-01-93

Directory: /hamradio/extra/

EXT21.ZIP 99672 6-18-93
EXTRA.FRQ 1157 8-25-91

Directory: /hamradio/general/

GEN012.ZOO 24160 6-18-93
GEN21.EXE 83879 3-19-93
GEN21.ZIP 72931 6-18-93
GENTEST.EXE 136865 1-11-92

Directory: /hamradio/help/

BCUMAHAM.TXT 5156 3-28-93
BITFTP.HLP 11347 5-09-93
ELMER100.ZIP 65425 3-01-93
ELMERS.DIR 46722 3-07-93
ELMRINFO.TXT 6984 2-02-93
ELMRLIST.TXT 46722 3-07-93
FAQ.TXT 9164 11-28-93

Directory: /hamradio/hf/

COMB6.ZIP 43190 3-01-93
GC103.ARC 23776 3-01-93
MICROMUF.BAS 4881 3-01-93
MICROMUF.PAS 7695 3-01-93
SOL_GEO.DAT 24836 2-02-93

SOL_TERA.TXT 27028 2-02-93

Directory: /hamradio/internet/

FTPSITES.TXT 3480 6-06-93
GATEWAYS.TXT 5785 2-02-93
HAMEMAIL.TXT 223537 2-02-93
MAILGATE.TXT 22734 11-18-93
NEWSGRPS.TXT 6917 2-02-93
RECINFO.TXT 9252 3-14-93
USNETSEL.TXT 8164 2-02-93

Directory: /hamradio/macstuff/exams/

ADVANCED.SIT 133986 4-11-93
EXTRA.SIT 128944 4-11-93
GENERAL.SIT 97148 4-11-93
NOVICE.SIT 121453 4-11-93
TECH.SIT 107031 4-11-93
TSTADVAN.HQX 536625 11-11-93
TSTEXTRA.HQX 476347 11-11-93
TSTGEN.HQX 320149 11-11-93
TSTNOV.HQX 409007 11-11-93
TSTTECH.HQX 341519 11-11-93

Directory: /hamradio/macstuff/misc/

FRQVALET.HQX 114671 11-21-93
MACSOFT.TXT 28948 11-21-93

Directory: /hamradio/macstuff/morse/

CODE1_0.HQX 44302 11-11-93
CODETUTR.HQX 23957 11-11-93
MAC525_1.HQX 89968 8-17-93
MAC535.HQX 122083 8-17-93
MANIA.HQX 48803 11-11-93
MASTER.HQX 58146 11-11-93
MCMORSIT.HQX 78187 11-21-93
MORSE.MAC 263 3-02-91
MORSE.HQX 16369 11-11-93
MORSE1_1.HQX 16568 11-11-93
TRAINER.HQX 121407 11-11-93

Directory: /hamradio/macstuff/packet/

SAVANTDM.HQX 178005 8-17-93
SAVNTUPD.HQX 80757 8-17-93

Directory: /hamradio/macstuff/tcpip/

SOFTKISS.HQX 145274 8-17-93

Directory: /hamradio/macstuff/tcpip/mac-nos/

CONFIG.HQX 424 9-27-93
IM10B27N.HQX 483 9-27-93
NET2325.CPT 198493 9-27-93
NET2325.HQX 325 9-27-93
NET2326.CPT 198431 9-27-93
NET2326.HQX 330 9-27-93
NOSINTRO.MSW 69121 4-23-92
TCP_IP.SIT 172688 9-27-93

Directory: /hamradio/macstuff/utility/

CPTXPAND.HQX 18256 11-21-93
DEARJ.SIT 14776 11-18-93
MACGZIP.CPT 140672 11-18-93
STUFLITE.BIN 465987 11-18-93
UUTOOL.HQX 76605 11-18-93

Directory: /hamradio/misc/

9PN-25PN.TXT 676 3-27-93
AUTOLOG.ZIP 109886 3-19-93
BATTRIES.TXT 9694 2-02-93
BBS_LIST.TXT 41800 2-28-93
BEACONS.INF 2284 7-29-92
CA-PHONE.BBS 1338 11-06-92
CHART.C 1999 3-26-93
CHURCVR.TAR 491520 8-04-93
CONDOR.INF 2870 9-26-92
CONDORMP.TXT 3486 7-16-89
EASYLOGR.ZIP 228482 3-19-93
ELMER.INF 9129 11-21-93
ELMER.LST 53132 11-21-93
FCC-PRB1.TXT 25754 4-05-93
FIELDDAY.EXE 239510 11-11-93
FLNTALAW.TXT 3528 2-02-93
HAMPLTES.TXT 5507 2-02-93
HAM_READ.ARC 1366 3-19-93
K1EA-619.EXE 315212 3-19-93
K2UYH.ARC 108510 3-19-93
LOGOS.PS 9258 2-02-93
MAILORDR.TXT 20383 2-02-93
MAP.ZIP 802214 3-19-93
MARS.FRQ 987 8-28-93
NICADS.INF 6533 3-26-93
PRO-2004.MOD 4418 3-26-93
PRO-2004.REV 18797 3-26-93
QSLCARD1.PS 27337 3-26-93
QSLCARD2.PS 6399 3-26-93
RFI.TXT 1991 3-17-93
RFI001.TXT 2158 6-08-89
RFI002.TXT 1815 6-08-89
RFI003.TXT 3288 6-08-89

RFI_TIPS.TXT 5948 2-02-93
SCANNER.MOD 5287 3-26-93
SMITHCHA.PS 23664 3-26-93
UC-U2AT.REV 7239 3-26-93
VHFPROP.BAS 24498 3-26-93

Directory: /hamradio/mods/

2ETO2AT.MOD 1443 8-07-93
56KBFIX.MOD 1093 5-26-93
741AMODS.ZIP 8974 5-26-93
760XLT.MOD 490 5-26-93
ALLBAND.MOD 2870 5-26-93
ALR22T.MOD 2152 5-26-93
BC205XLT.MOD 4221 5-26-93
DJ-580 155310 5-26-93
DJ500.MOD 2885 5-26-93
DR510.MOD 4186 5-26-93
FRQSGALR.ZIP 206290 5-26-93
FT-530.MOD 2302 8-07-93
FT101E.MOD 2639 5-26-93
FT209RH.MOD 1034 5-26-93
FT212RH.MOD 1345 5-26-93
FT23R.MOD 776 5-26-93
FT411.MOD 4824 5-26-93
FT411-2.MOD 1026 5-26-93
FT470-2.MOD 9942 5-26-93
FT470-3.MOD 1951 5-26-93
FT4700.MOD 1195 5-26-93
FT727CAT.MOD 2520 5-26-93
FT727R.MOD 1071 5-26-93
FT747GX.MOD 1221 5-26-93
FT767GX.MOD 1452 5-26-93
HT-24-T.MOD 3581 7-24-93
IC-24.MOD 2071 5-26-93
IC-MU2.MOD 1186 5-26-93
IC02.MOD 2082 5-26-93
IC02-2.MOD 1231 5-26-93
IC02-3.MOD 861 5-26-93
IC04.MOD 1897 5-26-93
IC24-2.MOD 993 5-26-93
IC24-3.MOD 5387 5-26-93
IC2410.MOD 4437 5-26-93
IC28.MOD 479 5-26-93
IC2SAT.MOD 4994 5-26-93
IC2SAT-2.MOD 8131 5-26-93
IC32.MOD 2501 5-26-93
IC32-2.MOD 2719 5-26-93
IC3200A.MOD 452 5-26-93
IC37.MOD 3900 5-26-93
IC735IBM.MOD 1407 5-26-93

IC900.MOD 2945 5-26-93
ICOM32AT.MOD 1937 5-26-93
ICOM735.1 3614 5-26-93
ICOM735.2 1380 5-26-93
ICOM735- 3614 5-26-93
ICW2A.MOD 13392 5-26-93
KAMDCD.MOD 2048 5-26-93
KENWD930.MOD 6640 5-26-93
NOAASTNS.ZIP 20995 5-26-93
PK232LOK.MOD 1858 5-26-93
PORTABLE.ANT 1735 5-26-93
PRO2004.MOD 5157 5-26-93
PRO2005.MOD 2602 5-26-93
PRO2006.MOD 3119 5-26-93
PRO2020.MOD 4775 5-26-93
PRO34.MOD 1239 5-26-93
R7000.MOD 3404 5-26-93
R7000-2.MOD 26880 5-26-93
RADIO.MOD 4915 5-26-93
RDIOMODS.SRV 956 5-26-93
TC2DUPLX.MOD 1581 5-26-93
TH-215A.MOD 2174 3-26-93
TH215 2072 5-26-93
TH215.MOD 2227 5-26-93
TH225.MOD 2932 5-26-93
TH25.MOD 7811 5-26-93
TH27A 6725 5-26-93
TH28A 2608 5-26-93
TH75.MOD 1385 5-26-93
TINY2TNC.MOD 1431 5-26-93
TM-721A.MOD 4867 3-26-93
TM-741-M 17526 5-26-93
TM2570A.MOD 778 5-26-93
TM321A.MOD 600 5-26-93
TM321A-2.MOD 957 5-26-93
TM321A-3.MOD 1415 5-26-93
TM421A.MOD 1836 5-26-93
TM701.MOD 2979 5-26-93
TM701A.MOD 280 5-26-93
TM721.MOD 4228 5-26-93
TM721-2.MOD 2784 5-26-93
TM721-3.MOD 6073 5-26-93
TM721A 13389 5-26-93
TM731.MOD 1612 5-26-93
TM741.MOD 1230 5-26-93
TM941A-2.MOD 2723 5-26-93
TNC2.MOD 1589 5-26-93
TNC2A.MOD 3329 5-26-93
TS-930S.MOD 2226 3-26-93
TS140.MOD 563 5-26-93

TS430.MOD 825 5-26-93
TS430-2.MOD 844 5-26-93
TS430MOD.DOC 2719 3-26-93
TS430S.REV 5066 3-26-93
TS440.MOD 1589 5-26-93
TS440-AT.MOD 971 5-26-93
TS440S.INT 9986 3-26-93
TS680.MOD 514 5-26-93
TS680-2.MOD 2940 5-26-93
TS711.MOD 123 5-26-93
TS790A.MOD 5059 5-26-93
TS850-1.MOD 12088 5-26-93
TS850-2.MOD 9086 5-26-93
TS930.MOD 6931 5-26-93
TS940IBM.MOD 2539 5-26-93
U2AT.MOD 3161 5-26-93
UNI2510.MOD 1622 5-26-93
W21AT.MOD 4330 10-10-93

Directory: /hamradio/morse/

AUTOCW.ARC 60849 3-01-93
CODETEST.HIN 7287 3-26-93
CW.ARC 62536 3-01-93
CW104.ZIP 83367 3-01-93
CWDEMO.ZIP 573318 11-11-93
FFTMORSE.ZIP 27344 3-01-93
HAMCOM21.ZIP 182531 3-01-93
MACHINE.ARC 13061 3-01-93
MOR21.ZIP 53013 6-18-93
MORSE.BAS 5661 3-01-93
MORSE30B.ZIP 71113 3-01-93
MORSETST.BAS 7179 3-01-93
PROCW.ZIP 24227 3-01-93
ROBOCOPY.ZIP 27346 3-01-93
SM316.ZIP 109484 3-01-93
SUPERIOR.SHR 99149 11-25-93

Directory: /hamradio/mswin/

DSP2D_UP.ZIP 26368 11-11-93
GMAIL.TXT 110 11-11-93
GMAIL.ZIP 78712 11-11-93
ICMPCMD.ZIP 3294 11-11-93
MSWINNOS.ZIP 4014 11-11-93
NETSORT.ZIP 1505 11-11-93
QVTNET23.ZIP 212649 11-11-93
RTSORT.ZIP 8192 11-11-93

Directory: /hamradio/newfiles/

AMPR.ORG 409718 7-06-93
FRQSGALR.ZIP 206290 5-26-93
NETAMSRC.ARC 56320 9-29-93
NETMAC52.SIT 178633 9-29-93
NETMAC55.SIT 179770 9-29-93
NET_AMIG.ARC 108322 9-29-93
NET_BM.ARC 37772 9-29-93
NET_DES.ARC 26249 9-29-93
NET_DOC.ARC 143194 9-29-93
NET_EW.ARC 115955 9-29-93
NET_MAC.HQX 223461 9-29-93
NET_READ.ME 2443 9-29-93
NOAASTNS.ZIP 20995 5-26-93
NOS_KIT.DOC 4313 11-05-93
NOS_KIT.ZIP 659372 11-05-93
NTEX_MS.ARC 118873 3-19-93
PCECAP.ZIP 100174 3-19-93
TEC20.ZIP 88796 3-19-93
TEC21.EXE 95783 3-19-93
TRAVINFO.LST 38204 3-26-93
TUNEUP.TNC 2557 7-03-91
UC-U2AT.REV 7239 3-26-93
WIRETAP.TXT 32215 3-26-93

Directory: /hamradio/novice/

NOV21.EXE 106365 3-19-93
NOVICE25.ARC 50049 3-01-93
NOV_TEST.ZIP 95588 3-01-93

Directory: /hamradio/nts/

3RDPARTY.LST 1802 9-09-91
CANADA.ADR 375 2-14-90
COUNTRY.ADR 2975 11-25-91
NTS12.ZIP 93145 6-18-93
NTSDISK.EXE 37401 11-20-91
RGRAM27.ZIP 48027 3-19-93
ZIPKEY.ZIP 198368 11-11-93

Directory: /hamradio/os2/

OS2NOSV4.ZIP 262476 11-11-93
OS2PMAIL.ZIP 36178 11-11-93
OS2SPEED.ZIP 2050 11-11-93
PMNOS1DS.ZIP 843122 11-11-93
PMNOS1DX.ZIP 377128 11-11-93

Directory: /hamradio/packet/

9600BAUD.PKT 8154 3-06-91
A802MANP.TXT 35627 8-10-93
AMTORFRQ.TXT 9158 10-13-93
ARYGATE.TXT 10286 4-11-93

```
AUTOBPQ.ZIP 92993 9-04-93
AX25SPEC.TXT 66235 3-30-93
BBSTIP01.TXT 1435 1-04-91
BBSTIP02.TXT 1868 1-04-91
BBSTIP03.TXT 1869 1-04-91
BBSTIP04.TXT 2032 1-04-91
BBSTIP05.TXT 2196 1-04-91
BBSTIP06.TXT 1132 1-04-91
BBSTIP07.TXT 1180 1-04-91
BBSTIP08.TXT 863 1-04-91
BBSTIP09.TXT 2260 1-04-91
BBSTIP10.TXT 1325 1-04-91
BBSTIP11.TXT 1755 1-04-91
BBSTIP12.TXT 2222 1-04-91
BBSTIP13.TXT 2305 1-04-91
CATEGORY.LST 3477 1-26-92
CHEAPPKT.TXT 4258 3-30-93
FAQ.TXT 33570 3-08-93
FAQ_PAKT.TXT 29942 2-02-93
HFBBS.TXT 19833 10-13-93
HFHINTS.TXT 3020 4-05-90
HI-SPEED.NET 15864 8-07-93
HIERADR.DOC 4849 6-15-90
INFOPAKT.TXT 39574 2-02-93
KAM401.ARC 156061 3-01-93
NEXTGEN.BBS 3948 3-21-93
PKTINFO1.TXT 2891 2-20-93
PKTINFO2.TXT 6338 2-02-93
ROUTING.TXT 28069 3-26-93
RTTY12G.ARC 126651 3-01-93
SETTINGS.TNC 1089 7-03-91
TTY37.ARC 36600 3-01-93
WP.DOC 1507 5-09-93
XPCOM131.ZIP 403741 5-29-93

Directory: /hamradio/packet/loz/

00-INDEX.TXT 2446 4-19-93
PACKET01.LOZ 3746 3-03-93
PACKET02.LOZ 9436 3-04-93
PACKET03.LOZ 6675 3-07-93
PACKET04.LOZ 7372 3-10-93
PACKET05.LOZ 6155 3-17-93
PACKET06.LOZ 15037 3-23-93
PACKET07.LOZ 5707 5-11-92
PACKET08.LOZ 6715 5-12-92
PACKET09.LOZ 4578 5-12-92
PACKET10.LOZ 8698 1-31-93
PACKET11.LOZ 6493 1-31-93
PACKET12.LOZ 5881 5-13-92
PACKET13.LOZ 6285 5-29-92
```

PACKET14.LOZ 7157 5-13-92
PACKET15.LOZ 4714 5-14-92
PACKET16.LOZ 3396 5-14-92
PACKET17.LOZ 4683 5-14-92
PACKET18.LOZ 2168 5-14-92
PACKET19.LOZ 4902 5-15-92
PACKET20.LOZ 7564 5-15-92
PKTINF01.TXT 4109 7-22-91
PKTINF02.TXT 6580 7-28-91
PKTINF03.TXT 4555 8-06-91
PKTINF04.TXT 3806 8-12-91
PKTINF05.TXT 4484 8-21-91
PKTINF06.TXT 4192 9-03-91
PKTINF07.TXT 4885 9-09-91
PKTINF08.TXT 4676 9-17-91
PKTINF09.TXT 3938 10-01-91
PKTINF10.TXT 2786 10-28-91
PKTINF11.TXT 3412 11-12-91
PKTINF12.TXT 7717 11-26-91
PKTINF13.TXT 2480 12-17-91
PKTINF14.TXT 2499 1-06-92
PKTINF15.TXT 2975 1-06-92
PKTINF16.TXT 1646 1-14-92

Directory: /hamradio/packet/software/

APL700.EXE 412928 8-26-93
FE.ZIP 16626 7-14-93
GP.DOC 125349 7-24-93
GP-1X50.ZIP 370518 7-06-93
LLINK220.ZIP 375144 11-21-93
PAX285.ZIP 15395 7-14-93
PCT214.ZIP 378739 3-01-93
PKGOL624.ZIP 323067 3-26-93
PKTSFTWR.TXT 4185 2-02-93
RTTY12G.ARC 126651 3-01-93
SELCAL11.ZIP 12590 3-01-93
TTY37.ARC 36600 3-01-93
XPCOM131.ZIP 403741 5-17-93

Directory: /hamradio/packet/software/aa4re/

AA4REBBS.INF 2654 4-11-93
AA4REBBS.ZIP 357277 3-19-93
B21TANSI.ZIP 3620 5-26-93
BB21HC.ZIP 259837 5-26-93
BB21HL.ZIP 110380 5-26-93
BB21HN.ZIP 358648 5-26-93
BB21HP.ZIP 239199 5-26-93
DOC211.ZIP 99644 5-26-93
HH21H.INF 1377 5-26-93

MBB35SRC.ZIP 72475 5-26-93
MBBIOS35.ZIP 29299 5-26-93
MBBIOS38.ZIP 39704 5-26-93
WATCHDOG.ZIP 8425 5-26-93

Directory: /hamradio/packet/software/dsp/

DOC.ZIP 301000 9-02-93
DSP105.ZIP 46817 9-02-93
DSP4SCHE.ZIP 238499 9-02-93
DSPTIPUP.ZIP 21417 9-02-93
SOURCE.ZIP 671625 9-02-93

Directory: /hamradio/packet/software/g8bpq/

BPQ405E.ZIP 143360 5-26-93
BPQ406.ZIP 170880 5-26-93
BPQ406A.ZIP 20216 5-26-93
BPQ406E.ZIP 181926 5-26-93
RSWD0330.ZIP 66213 5-26-93
RZSW30.ZIP 97411 5-26-93
TFPCX.ZIP 34817 5-26-93

Directory: /hamradio/packet/software/thebox/

BOOTARC.EXE 243874 7-19-93
INSTALL.BAT 174 7-19-93
NOS_1229.EXE 203295 7-06-93
NOS_1229.LP 172009 7-06-93
NOS_1229.MAN 221639 7-06-93
NOS_1229.MAP 75531 7-06-93
NOS_1229.NR 168281 7-06-93
NOS_1229.VER 52 7-06-93
SOURCARC.EXE 131999 7-19-93
SYSARC.EXE 105377 7-19-93
SYSOP15.ENG 65121 7-19-93
UPDATE.BAT 1354 7-19-93

Directory: /hamradio/packet/software/thenet/

THENET.FLA 6498 7-19-93
THENET.INF 4005 7-19-93
THENET.PAR 3692 7-19-93
TNET-X1G.TXT 68 7-19-93
TNET-X1G.ZIP 119680 7-19-93
TNET-X1H.ZIP 123904 7-19-93
TNET-X1J.EXE 218857 11-11-93
TNET-X1J.TXT 280 11-21-93
TNET-X1J.ZIP 335650 11-11-93
X1JDEV.EXE 116275 11-11-93

Directory: /hamradio/packet/software/f6fbb/

FBB515.ZIP 991152 7-30-93
TPK181.ZIP 579533 7-30-93

Directory: /hamradio/packet/software/wa7mbl/

OIZ-UTIL.ARC 64062 7-30-93
REQDIR.ARC 34438 7-30-93

Directory: /hamradio/packet/software/wa8ded/

TNCDED.DOC 29130 7-30-93
TNCDED.HEX 45068 7-30-93
TNCDED.MSG 4116 7-30-93
WA8DED 1004 7-30-93
WA8DED.DOC 14790 7-30-93
WA8DED.ROM 19284 7-30-93

Directory: /hamradio/packet/tcpip/

00-INDEX.TXT 1602 6-08-93
AMPR.ORG 409718 7-06-93
AMPRHOST 303457 7-06-93
AMPRINFO.TXT 5603 2-02-93
AMPRXORG.REV 516969 7-06-93
ASMOBJ.MSG 607 6-08-93
ASMOBJ.ZIP 6766 6-08-93
BMEXE332.ZIP 30898 6-08-93
BMSRC_ST.ARC 25334 8-07-93
CONNEX.Z 12030 7-06-93
E920603.ZIP 189423 6-08-93
EXPIRY.ZIP 53196 6-08-93
HELP_V02.ZIP 11984 7-06-93
INTRONOS.ZIP 54272 7-06-93
MAN-9106.ZIP 57169 6-08-93
NAN24HYC.ZIP 42635 6-08-93
PCNET.EXE 227498 4-26-92
PKTDRVR.INF 157 6-08-93
S920603.ZIP 656302 6-08-93
SATTRACK.ZIP 34886 7-06-93
SLFP123.ZIP 30476 6-08-93
TCPIP.INF 5818 6-02-93
VIEW9206.ZIP 384591 6-08-93

Directory: /hamradio/packet/tcpip/bm/

BM.DOC 16641 9-02-93
BM332C.TXT 235 9-02-93
BM332C.ZIP 52889 9-02-93
BMEXE.ARC 38547 9-02-93
BMH02.TXT 790 9-02-93
BMH02EXE.ZIP 300305 9-02-93
BMH02SRC.ZIP 60096 9-02-93
BMUTIL.ZIP 11546 9-02-93
VIEW0207.ZIP 320436 9-02-93

Directory: /hamradio/packet/tcpip/docs/

BEGIN.DOC 110255 2-07-91
FAQ-1292 75121 7-06-93
INTRONOS.ZIP 54272 7-06-93
KA9QBGN.ZIP 190366 6-08-93
KA9QNOS.NR 141577 7-06-93
KA9QNOS.PS 133704 7-06-93
NETNIX.PS 286542 7-06-93
NOSBGNLP.ZIP 57488 7-06-93
NOSBGNPS.ZIP 137021 7-06-93
RSPF22P.TXT 85164 7-06-93
TAPR92.TXT 72334 7-06-93
TAPR9600.MOD 11209 7-06-93
TDMA.TXT 12713 7-06-93
USERMAN.ZIP 112344 7-06-93

Directory: /hamradio/packet/tcpip/g1emm/

G1EMMKIT.EXE 168079 7-06-93
G1EMMKIT.ZIP 213973 7-06-93
KH113016.EXE 193643 7-06-93
KH113016.ZIP 593938 7-06-93
PCELM21.ZIP 116682 7-06-93
READ.ME 1077 7-06-93
SMALLEMM.EXE 134945 7-06-93

Directory: /hamradio/packet/tcpip/gpsnos/

GPSC1DOC.ZIP 38361 7-30-93
GPSC1EXE.ZIP 162104 7-30-93
GPSC1HLP.ZIP 13415 7-30-93
GPSC1SRC.ZIP 638737 7-30-93

Directory: /hamradio/packet/tcpip/gracilus/

GCALLBK.TXT 440 7-06-93
GCALLBK.ZIP 13914 7-06-93
GRAC20M2.ZIP 539910 7-06-93
P10DVR.TXT 824 7-06-93
P10DVR.ZIP 25230 7-06-93
P10R30E.TXT 29184 7-06-93
P10R30E.ZIP 291851 7-06-93
TWINDV21.ZIP 38656 7-06-93

Directory: /hamradio/packet/tcpip/nos/

KIT_SRC.TXT 4191 11-05-93
KIT_SRC.ZIP 39567 11-05-93
NOS-SLFP.ZIP 310211 6-08-93
NOSVIEW.ZIP 1764 7-06-93
NOSVW304.ZIP 682322 7-06-93
ROSE-NOS.ZIP 18050 7-06-93

Directory: /hamradio/packet/tcpip/nos-kit/

KIT_SRC.TXT 4191 10-27-93
KIT_SRC.ZIP 39567 10-27-93
NOS_KIT.DOC 4313 10-27-93
NOS_KIT.ZIP 659372 10-27-93

Directory: /hamradio/packet/tcpip/pa0gri/

GR-BUGS.BEE 5120 7-06-93
GR-NOTES.BEE 19584 7-06-93
GRIBEE08.ZIP 831616 7-06-93
GRNOS08.ZIP 268800 7-06-93
GRNOS08S.ZIP 257408 7-06-93
NOS_1229.DOC 172009 7-06-93
NOS_1229.EXE 203295 7-06-93
NOS_1229.MAN 221639 7-06-93
NOS_1229.MAP 75531 7-06-93
NOS_1229.ROF 168281 7-06-93
NOS_1229.VER 52 7-06-93
NOS_1229.ZIP 821866 7-06-93
RSPF0826.TXT 294 7-06-93
RSPF0826.ZIP 53695 7-06-93

Directory: /hamradio/packet/tcpip/pe1chl/

920420.DIR 6353 7-06-93
920420LT.ARC 175565 7-06-93
920420MT.ARC 111710 7-06-93
920420TC.ARC 153934 7-06-93
920420TP.ARC 104054 7-06-93
920420TS.ARC 113244 7-06-93
AUTOEXEC.DRS 2321 7-06-93
HISTORY.ARC 48620 7-06-93
NETDOC1.ARC 16485 7-06-93
NETDOC2.ARC 44672 7-06-93
PACSAT.ARC 87474 7-06-93
PB920430.ZIP 131138 7-06-93
PE1CHL.NET 417 7-06-93
README.CHL 384 7-06-93
SCCPRIN5.ARC 159020 7-06-93

Directory: /hamradio/packet/tcpip/wg7j/

JNOS107B.EXE 283045 7-06-93
JNOS107B.ZIP 987123 7-06-93
WG7JDOC.ZIP 46266 7-06-93

Directory: /hamradio/rigs/

COMPICOM.TXT 15707 3-26-93
FRGLOD10.ZIP 14451 4-01-93
HF_RIGS.TXT 4317 2-02-93
HT_INFO.TXT 10990 2-02-93

IC-12AT.REV 6682 3-26-93
IC-32AT.MOD 2715 3-26-93
IC02A.MOD 2424 3-26-93
IC02ATR.MOD 3294 3-26-93
IC28H.REV 6855 3-26-93
ICOM.C 9232 3-14-93
ICOM-110.C 9842 3-26-93
ICOMCI-V.CMD 7443 3-26-93
INFOEQPT.TXT 10063 2-02-93
KENWD930.MOD 6640 3-26-93
MNUFCTRS.TXT 5051 2-02-93
QST_REVW.TXT 41097 2-02-93
R7000.HIN 26430 3-26-93

Directory: /hamradio/satelite/

DOVE3W13.ZIP 43150 3-01-93
ELETRANS.C 2176 3-26-93
GEOSAT20.ZIP 56405 3-01-93
HAM_SAT.TXT 10967 2-02-93
ORBIT23.ARC 36852 3-01-93
PROTOCOL.1 39022 6-19-89
PROTOCOL.2 2157 6-19-89
QUICKS24.ZIP 77120 3-01-93
SATELITE.BAS 5642 3-01-93
SATELITE.HOW 18571 3-26-93
SATTAIM.ARC 1860 3-01-93
SATTRACK.INF 5017 3-26-93
SATTRACK.ZIP 34886 11-11-93
TRAK280.ZIP 346847 3-01-93
USAT92B2.ZIP 86782 3-01-93
WU120EXE.ZIP 222368 3-01-93

Directory: /hamradio/satelite/arsene/

ARSENE.TXT 1968 7-19-93
TELEM14G.ZIP 29363 7-19-93
TELEM14H.ZIP 29447 7-19-93
TELEMENG.ZIP 39938 7-19-93
TELEMFRA.ZIP 40680 7-19-93

Directory: /hamradio/sstvfax/

AUTOFAX.ARC 12452 3-01-93
FFT.COM 52096 2-02-93
FFTH.COM 53760 2-02-93
JVFAX50.ZIP 407934 3-01-93
SSTVFAX2.ZIP 28323 3-01-93
SSTVWFAX.TXT 37309 2-02-93
WEFAX.ARC 35968 3-01-93
WXRDR22.ARC 98944 3-01-93

Directory: /hamradio/swl/

FAQ_SWL.TXT 21936 2-02-93
SWL114.ZIP 302908 3-01-93
SWL_INFO.TXT 20666 2-02-93

Directory: /hamradio/technici/

TEC22.ZIP 74516 6-18-93
TECHTEST.EXE 148542 1-11-92

Directory: /hamradio/utility/

ARJ230NG.EXE 200704 6-18-93
ARJ241A.EXE 223856 8-07-93
BOOZ.ZIP 12639 6-18-93
COMP16.ZIP 16102 6-18-93
COMP430D.ZIP 20241 6-18-93
FILTER11.ARC 55936 3-01-93
INTMOD60.ARC 11902 3-01-93
JLEM.ZIP 14846 2-02-93
OHMSLAW.ARC 22197 3-01-93
PDZIP.ZIP 63473 6-18-93
PKUNZIP.EXE 23528 3-15-90
PKUNZIP2.EXE 28806 5-17-93
QEXTRACT.ZIP 43123 6-18-93
RC85PR15.ZIP 50983 3-01-93
RFTOOLS.ARC 144799 3-01-93
UNARJ230.ZIP 39074 6-18-93
UNZIP.EXE 26838 6-18-93
UNZIP41.ARC 121470 6-18-93
UNZIP41.EXE 21933 6-18-93
UUDECODE.BAS 5709 3-28-93
UUDECODE.C 5565 3-28-93
UUDECODE.DOC 519 3-28-93
UUDECODE.DBG 4658 11-21-93
UUEXE521.ZIP 32455 8-24-93
WHERITIS.ARC 30943 3-01-93
ZIP.EXE 59260 6-18-93
ZIP10EX.ZIP 158335 6-18-93
ZOO210.EXE 55721 6-18-93

Directory: /hamradio/vlf/

1750MTR.TXT 6532 2-02-93

907. Re: Illegal Ham Radio - Internet gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-29 03:13:22 UTC
From: david@stat.com
Message-ID: <ZsaRDc16w165w@stat.com>
Source record: 50949
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.policy

M.Willis@ee.surrey.ac.uk (Mike Willis) writes:

> Look all this 3rd party stuff. As far as we in Europe are concerned it is tot
> illegal. I do not want any of my intermet mail to go to packet or I may end u
> trouble. It has already happened once.
>
> The concept is great, we could really use it but it is against our (CEPT) law
> Therefore close these gateways or fix the problem by removing external links
> non 3rd party statesbefore it becomes necessary to take other (legal) steps t
> protect our licences.

It is illegal here in the states also, however, the US regulations allow
third-party traffic from overseas amateurs, as long as the
communication is still amateur to amateur.

Each message is screened at the wb7tpy internet gateway to make sure
this regulation is adhered to.

david

Editor, HICNet Medical Newsletter
Internet: david@stat.com FAX: +1 (602) 451-6135
Bitnet : ATW1H@ASUACAD

908. Re: Ham-Digital Digest V93 #118

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-29 15:45:30 UTC
From: WENDT@vax.ntp.springer.DE
Message-ID: <01H5W5S7CTWO000322@vax.ntp.springer.de>
Source record: 50946

unsubscribe

909. Re: Illegal Ham Radio - Internet gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-29 16:39:48 UTC
From: rcrw90@email.mot.com
Message-ID: <rcrw90-291193093948@node_13059.aieg.mot.com>
Source record: 50951

In article <1993Nov28.165758.28265@ee.surrey.ac.uk>,
M.Willis@ee.surrey.ac.uk (Mike Willis) wrote:

> Look all this 3rd party stuff. As far as we in Europe are concerned it is totally
> illegal. I do not want any of my intermet mail to go to packet or I may end up in
> trouble. It has already happened once.

Do I read this correctly, that if you legally send something via internet
and someone *else* in another country legally uses amateur radio to relay
that message then *you* could be in violation of your laws?

This seems to fly in the face of justice and responsibility.

Certainly I can see a regulatory agency jumping to conclusions, but it
would seem to me this should be a matter of educating them as to the actual
facts.

However even so, filtering messages from certain origins would hardly be a
new capability, the standard "kill" file should do that quite well.

--
Mike Waters rcrw90@email.mot.com AA4MW@KC7Y.PHX.AZ.US.NA

BOBS BEST BENT WIRE SK

910. PK-88 vs KPC-3 vs DPK-2 - Comments?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-29 16:43:59 UTC
From: djenkins@wang.com
Message-ID: <CH9IHD.HBG@wang.com>
Source record: 50947
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.digital.misc

The BayPac (BayCom) modem was fun, but, it is time to upgrade to a REAL TNC.

Most of my packet operation is in TCP/IP but some is still AX-25. All of it is in VHF/UHF (HF privs yes, radios no). The option of operating "portable" is attractive for coolness and/or emergencies, but, is not essential.

I am trying to decide between asking for a PK-88, KPC-3 or DPK-2. Some of the relative merits that I know of include:

PK-88: Y Y N Y ? ? $139.95

KPC-3: L 1 Y Y Y Y $119.95

DPK-2: L Y N Y 2 3 $109.95

```
^ ^ ^ ^ ^ ^ ^
| | | | | | |
| | | | | | +------- HRO Price
| | | | | |
| | | | | +--------- Open squelch operation
| | | | +------------ TNC-2 Compatible
| | | +--------------- PBBS
| | +------------------ WEFAX
| +---------------------- Kiss Mode
+------------------------ 12 Operation (L = Low power consumption)
```

1) The guy at HRO said it does KISS Mode but it didn't say in the catalog.
2) "100% firmware compatability with TAPR TNC-2"
"* TNC-2 Compatible * Runs all TNC-2proms"
3) $31.95 optional board

Oddly enough, the guy from HRO didn't talk up the DPK-2 at all. He said the other two would work fine but that if I wanted to do HF packet some day then I should not get the KPC-3.

Any comments/suggestions/recommendations/opinions are welcome/appreciated.

--
David E. Jenkins Home: (508) 632-4164 Wang Labs, Inc.
52 Norman Street Work: (508) 967-7284 M/S 014-690
Gardner, MA 01440-1916 Fax: (508) 967-2212 1 Industrial Ave.
Packet: n1mxv@wa1phy.ma e-mail: djenkins@wang.com Lowell, MA 01851

911. Network adapter card with WG7J NOS

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-29 18:10:29 UTC
From: boulaisg@ingenierie.telecom.hydro.qc.ca
Message-ID: <boulaisg.7.2CFA3B15@ingenierie.telecom.hydro.qc.ca>
Source record: 50948

This is the first time that I write in amateur radio newsgroup, so
excuse-me if I have written this article in the wrong newsgroup.

I have an Racal Interlan NI5210 network adapter card and would like that
card being recognized by NOS WG7J. I've got the Clarkson packet driver but
I don't know what parameters to setup in the AUTOEXEC.NOS. The only thing
that I know to do is ATTACH PACKET 0X61 and something else...
I would appreciate a copy of an AUTOEXEC.NOS

I have currently setup my PK-88 to be recognized by NOS but now, I would
like a Ham BBS on the company network for our +100 amateurs at the company.

You respond to me at BoulaisG@ingenierie.telecom.hydro.qc.ca
Thanks a lot and 73!
VE2GYB, Guy Boulais
Iberville, Quebec

912. Re: PK-88 vs KPC-3 vs DPK-2 - Comments?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-29 19:05:52 UTC
From: enge@enge.almaden.ibm.com
Message-ID: <2ddh6g$fd4@juniper.almaden.ibm.com>
Source record: 50950
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.digital.misc

In article <CH9IHD.HBG@wang.com>, Dave Jenkins <djenkins@wang.com> wrote:
>
>KPC-3: L 1 Y Y Y Y $119.95
> ^ ^ ^ ^ ^ ^ ^
> | +--------------------- Kiss Mode
>
>1) The guy at HRO said it does KISS Mode but it didn't say in the catalog.

KPC-3 does do KISS. Mine is running with the G8BPQ code right now.

Roy Engehausen, AA4RE
enge@almaden.ibm.com

913. Re: PK-88 vs KPC-3 vs DPK-2 - Comments?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-30 01:22:06 UTC
From: fmitch@netcom.com
Message-ID: <fmitchCHA6Gu.632@netcom.com>
Source record: 50952
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.digital.misc

Dave Jenkins (djenkins@wang.com) wrote:

: The BayPac (BayCom) modem was fun, but, it is time to upgrade to a REAL TNC.

: Most of my packet operation is in TCP/IP but some is still AX-25. All of it
: is in VHF/UHF (HF privs yes, radios no). The option of operating "portable"
: is attractive for coolness and/or emergencies, but, is not essential.

: I am trying to decide between asking for a PK-88, KPC-3 or DPK-2. Some of
: the relative merits that I know of include:

: PK-88: Y Y N Y ? ? $139.95

: KPC-3: L 1 Y Y Y Y $119.95

: DPK-2: L Y N Y 2 3 $109.95
: ^ ^ ^ ^ ^ ^ ^
: | | | | | | |
: | | | | | | +------- HRO Price
: | | | | | |
: | | | | | +--------- Open squelch operation
: | | | | +------------ TNC-2 Compatible
: | | | +--------------- PBBS
: | | +------------------ WEFAX
: | +---------------------- Kiss Mode
: +------------------------ 12 Operation (L = Low power consumption)

: 1) The guy at HRO said it does KISS Mode but it didn't say in the catalog.
: 2) "100% firmware compatability with TAPR TNC-2"
: "* TNC-2 Compatible * Runs all TNC-2proms"
: 3) $31.95 optional board

: Oddly enough, the guy from HRO didn't talk up the DPK-2 at all. He said the
: other two would work fine but that if I wanted to do HF packet some day then
: I should not get the KPC-3.

: Any comments/suggestions/recommendations/opinions are welcome/appreciated.

: --
: David E. Jenkins Home: (508) 632-4164 Wang Labs, Inc.
: 52 Norman Street Work: (508) 967-7284 M/S 014-690
: Gardner, MA 01440-1916 Fax: (508) 967-2212 1 Industrial Ave.
: Packet: n1mxv@wa1phy.ma e-mail: djenkins@wang.com Lowell, MA 01851

hi david...

mitch wa4osr here in mobile, alabama...

i have had all of the tnc's you mention (including the bay-pac)... i still have the dpk-2! it is a semi-clone of the tnc-2, and it does run KISS mode with the standard rom that comes with it... any software that runs in a tnc-2 will run in/with the dpk-2... the changes/improvements over the tnc-2 is much smaller size, has a 9.+ mhz clock and a real baud rate generator... it will go up to 38.4 kbaud to your terminal... it has the standard tnc-2 modem disconnect header in case u want to run an external 9600 baud modem with it... my dpk-2 is from the first production run that drsi made... i have had absolutely no problems with it...

mitch

--
---
fmitch@netcom.com
Felton "Mitch" Mitchell, WA4OSR in Mobile, Alabama USA
205-342-7259 home, 205-476-4100 work, 205-476-0465 FAX
co-sysop for W4IAX bbs running fbb ... sysop for WA4OSR DXCluster in Mobile..
---

914. NEED PBBS SOURCE for K5JB

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-30 02:19:23 UTC
From: TGOODIN@delphi.com
Message-ID: <931129.76763.TGOODIN@delphi.com>
Source record: 50953

I am looking for a C Source PBBS for inclusion in the K5JB Net Package
I am running on my ATT 3B2 Computer in UNIX SYS V
TGOODIN @ DELPHI. COM

915. Domain listing for LA area?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-30 02:35:58 UTC
From: aadamson@symantec.com
Message-ID: <2debifINN319@grumpy.symantec.com>
Source record: 50959

Help, I don't have a packet station up yet, but would like to get a current listing of the LA Domain. I'm not sure if it is on the internet somewhere or not. Any help?

Alan Adamson
aadamson@symantec.com

916. Re: HAM-server index file

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-30 03:15:47 UTC
From: gilbaronw0mn@delphi.com
Message-ID: <9311292209591.gilbaronw0mn.DLITE@delphi.com>
Source record: 50954
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc

>ARRLINDX.TXT 17591 3-02-93
>ARRLINFO.TXT 3321 2-02-93
>ARRLJOB.TXT 18455 2-02-93

Why do we WASTE bandwidth with long garbage like this list of files? The place for that is in a data base somewhere. If you want this list you should ftp it or have it emailed to you. IT DOES NOT BELONG on the newsgroup taking up an obscene amount of space.

Gil Baron, El Baron Rojo, W0MN Rochester,MN
"Bailar es Vivir"
PGP2.X key at key servers or upon request

917. Who should use gateways for what (was Re: wb7tpy gateway)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-30 05:12:10 UTC
From: winter@apple.com
Message-ID: <2dekna$ceu@apple.com>
Source record: 50955

In article <1993Nov23.085806.17098@mnemosyne.cs.du.edu>,
Jonathan Magee <jmagee@nyx10.cs.du.edu> wrote:
>The only use of the internet in ham radio should be to connect ham
>stations via worm holes ie only hams can use it.

That's exactly what the real-time gateways (as opposed to the mail-only
gateways) are doing. See Stan Horzepa's packet column in the December
QST.

>If some one wants to mail some on on Internet, they should get an
>internet connection. If some one wants to send a message via hte ham
>PBBS system they should get a licence and the gear need for packet radio.

Most of us originating messages from the Internet to the PBBS system
are hams. (It's required by the sysops of most mail gateways.)
We just don't want to sully ourselves by using AX.25. :-) :-)

Patty N6BIS

--
============================== Patty Winter ==============================
Apple contractor Internet: winter@apple.com
Sunnyvale, California AMPRNet: 44.4.4.50
"What about truth? What about reality?"
"What about the way the old ending tested in Canoga Park?"
================================ N6BIS ================================

918. Re: HAM-server index file

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-30 05:36:47 UTC
From: jherman@uhunix3.uhcc.Hawaii.Edu
Message-ID: <CHAI9C.A27@news.Hawaii.Edu>
Source record: 50956
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc

In article <9311292209591.gilbaronw0mn.DLITE@delphi.com> gilbaronw0mn@delphi.com (Gilbert Baron) writes:
>>ARRLINDX.TXT 17591 3-02-93
>>ARRLINFO.TXT 3321 2-02-93
>>ARRLJOB.TXT 18455 2-02-93
>
>Why do we WASTE bandwidth with long garbage like this list of files? The
>place for that is in a data base somewhere. If you want this list you should
>ftp it or have it emailed to you. IT DOES NOT BELONG on the newsgroup taking
>up an obscene amount of space.
>
> Gil Baron, El Baron Rojo, W0MN Rochester,MN

Phooey on you Gil! I for one am glad to see the list of files. This ham-server is a gold mine of info - I've gotten so many goodies off that list - I would have never known what they had to offer unless they had posted on here.

Jeff NH6IL

919. "ampr.org" for AX.25 PBBSs??? (was Re: wb7tpy gateway)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-30 06:18:55 UTC
From: winter@apple.com
Message-ID: <2deokf$i3p@apple.com>
Source record: 50957

```
In article <2ctpu1$h25@wvhpadm1.mentorg.com>,
Hank Oredson <Hank_Oredson@mentorg.com> wrote:
>In article <2crlmkINNoh8@network.ucsd.edu>,
>brian@nothing.ucsd.edu (Brian Kantor) writes:
>|> I would grit my teeth heavily and loudly, but
>|>
>|> wb6cyt@wb6cyt.#soca.ca.usa.na.ampr.org
>|>
>|> would be acceptable and would work when addresses were gatewayed from
>|> the BBS 'world' to the real internet.
>
>And in fact is what the FQDN actually is in the bbs network, we just don't
>usually add the top domain because it is only required at the gates ...

Do I understand correctly that the AX.25 PBBS network folks decided
to append "ampr.org" to their node names? That's ludicrous! "ampr.org"
is an Internet domain (assigned by the NIC at SRI a decade ago), and
should only be used in conjunction with TCP/IP stations.

Patty

--
============================== Patty Winter ==============================
Apple contractor Internet: winter@apple.com
Sunnyvale, California AMPRNet: 44.4.4.50
"What about truth? What about reality?"
"What about the way the old ending tested in Canoga Park?"
================================= N6BIS =================================
```

920. Re: "ampr.org" for AX.25 PBBSs??? (was Re: wb7tpy gateway)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-30 06:52:53 UTC
From: enge@enge.almaden.ibm.com
Message-ID: <2deqk5$9fn@juniper.almaden.ibm.com>
Source record: 50958

In article <2deokf$i3p@apple.com>, Patty Winter <winter@apple.com> wrote:
> ...
>
>Do I understand correctly that the AX.25 PBBS network folks decided
>to append "ampr.org" to their node names? That's ludicrous! "ampr.org"
>is an Internet domain (assigned by the NIC at SRI a decade ago), and
>should only be used in conjunction with TCP/IP stations.
>
>

This idea was proposed to make the use of the Internet <-> AX.25
transition easier and to eliminate confusion over the naming
conventions. Its being discussed and constructive ideas, comments, and
counter proposals are welcome.

As far as Internet domains restricted to TCP/IP, I guess the UUCP
people might take umbrage to that statement.

In fact, there are a lot similarities between the dial up UUCP world
and the AX.25 world.

Roy Engehausen, AA4RE
enge@almaden.ibm.com

921. Re: Illegal Ham Radio - Internet gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-30 09:22:24 UTC
From: M.Willis@ee.surrey.ac.uk
Message-ID: <1993Nov30.092224.4520@ee.surrey.ac.uk>
Source record: 50960
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.policy

In article <ZsaRDc16w165w@stat.com>, david@stat.com (David Dodell) writes:
|> M.Willis@ee.surrey.ac.uk (Mike Willis) writes:
|>
|> > Look all this 3rd party stuff. As far as we in Europe are concerned it is tot
|> > illegal. I do not want any of my intermet mail to go to packet or I may end u
|> > trouble. It has already happened once.
|> >
|> > The concept is great, we could really use it but it is against our (CEPT) law
|> > Therefore close these gateways or fix the problem by removing external links
|> > non 3rd party statesbefore it becomes necessary to take other (legal) steps t
|> > protect our licences.
|>
|> It is illegal here in the states also, however, the US regulations allow
|> third-party traffic from overseas amateurs, as long as the
|> communication is still amateur to amateur.
|>
|> Each message is screened at the wb7tpy internet gateway to make sure
|> this regulation is adhered to.
|>
|> david
|>
|> ---
|> Editor, HICNet Medical Newsletter
|> Internet: david@stat.com FAX: +1 (602) 451-6135
|> Bitnet : ATW1H@ASUACAD
This particular case was an advertisment for used gear, definately not allowed
in the UK. Is it allowed in the USA?

922. Re: Baycom & OS/2

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-30 09:54:54 UTC
From: kurpiers@rbg.informatik.th-darmstadt.de
Message-ID: <2df59elNNkhd@rs18.hrz.th-darmstadt.de>
Source record: 50961

In article <weiss.754335619@maroon.tc.umn.edu>, weiss@maroon.tc.umn.edu () writes:
> Is it possible to run a Baycom-type modem as a DOS application under OS/2
> using either the Baycom ax25 driver and baycom software or NOS?
>
> Or is the interrupt activity way too high for a 385-25??
>
> Not wanting to shell out $100 for a new TNC at 1200 baud I'd love to get the
> Baycom to work, if possible.
>
> Thanks for any experiences,
>
> __jeffrey weiss n0irr
>
It is too high for a Dos application. It would be no problem if someone
would write a device driver for packet...

73' Alexander DL8AAU

923. Re: Illegal Ham Radio - Internet gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-30 09:55:58 UTC
From: popovich@prince.cs.columbia.edu
Message-ID: <POPOVICH.93Nov30045558@prince.cs.columbia.edu>
Source record: 50962
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.policy

Mike Willis writes:

> This particular case was an advertisment for used gear, definately not allowed
> in the UK. Is it allowed in the USA?

Are you guys not allowed to sell your used gear, or just not allowed
to advertise it over the air? We are allowed to sell our gear to
anyone, whether licensed or unlicensed, and we also have Section
97.113 of the US Amateur Radio rules:

(Section) 97.113 Prohibited transmissions.

(a) No amateur station shall transmit any communication the purpose of
which is to facilitate the business of commercial affairs of any
party. No station shall transmit communications as an alternative to
other authorized radio services, except as necessary to providing
emergency communications. A station may, however, transmit
communications to:

(1) ...Deleted as irrelevant...

(2) Inform other amateur operators of the availability of apparatus
normally used in an amateur station, including such apparatus
for sale or trade. This exception is not authorized to any
person seeking to derive a profit by buying or selling such
apparatus on a regular basis.

(b) ...This and subsequent subsections have also been deleted as irrelevant...
-Steve

924. Re: PK-88 vs KPC-3 vs DPK-2 - Comments?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-30 13:34:41 UTC
From: mark@icsbelf.co.uk
Message-ID: <CHB4Du.MG7@icsbelf.co.uk>
Source record: 50963
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.digital.misc

```
In article <fmitchCHA6Gu.632@netcom.com>,
Felton Mitchell <fmitch@netcom.com> wrote:
>Dave Jenkins (djenkins@wang.com) wrote:
>
>: I am trying to decide between asking for a PK-88, KPC-3 or DPK-2. Some of
>: the relative merits that I know of include:
>
>: PK-88: Y Y N Y ? ? $139.95
>
>: KPC-3: L 1 Y Y Y Y $119.95
>
>: DPK-2: L Y N Y 2 3 $109.95
>: ^ ^ ^ ^ ^ ^ ^
>: | | | | | | |
>: | | | | | | +------- HRO Price
>: | | | | | |
>: | | | | | +--------- Open squelch operation
>: | | | | +------------ TNC-2 Compatible
>: | | | +--------------- PBBS
>: | | +------------------ WEFAX
>: | +---------------------- Kiss Mode
>: +------------------------ 12 Operation (L = Low power consumption)
>
>: 1) The guy at HRO said it does KISS Mode but it didn't say in the catalog.
>: 2) "100% firmware compatability with TAPR TNC-2"
>: "* TNC-2 Compatible * Runs all TNC-2proms"
>: 3) $31.95 optional board
>
>
>i have had all of the tnc's you mention (including the bay-pac)... i still
>have the dpk-2! it is a semi-clone of the tnc-2, and it does run KISS
>mode with the standard rom that comes with it... any software that runs
>in a tnc-2 will run in/with the dpk-2... the changes/improvements over
>the tnc-2 is much smaller size, has a 9.+ mhz clock and a real baud rate
>generator... it will go up to 38.4 kbaud to your terminal... it has the
>standard tnc-2 modem disconnect header in case u want to run an external 9600
>baud modem with it... my dpk-2 is from the first production run that
>drsi made... i have had absolutely no problems with it...

I have 2 PK-88's and one DPK-2. The PK-88 comes in a strong case, is RF quiet,
but draws 500ma and isn't TNC-2 compatible. I don't know if an open squelch
add on is available. I run both of mine permanently in KISS mode. No problems.
```

The DPK-2 comes in a strong but lightweight case, is low power and TNC-2 compatible. Mine has been running TheNet X-1J continuously for a month now, without problems. I bought mine with the 10MHz upgrade and the open squelch add on board. It came in at a *lot* more than $109, but then electronic goods are generally a rip-off over here anyway... There's a slight problem with RF noise from mine, but it only affects one radio which appears to have virtually no IF filtering - an Alinco DR-112EM.

I'm going to be in Atlanta & LA next month (Dec). Anyone care to recommend a ham shop where I can get another DPK-2 at a sensible price?

-mark
--
Mark Willis Internet: mark@icsbelf.co.uk
ICS Computing Group Ltd. Packet: GI0PEZ@GB7TED.#63.GBR.EU
Belfast AmprNet: 44.131.15.3
Northern Ireland CompuServe: 100317,3025

925. Re: PK-88 vs KPC-3 vs DPK-2 - Comments?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-30 14:01:28 UTC
From: dodsonm@freenet2.scri.fsu.edu
Message-ID: <2dfjno$9im@mailer.fsu.edu>
Source record: 50964
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.digital.misc

djenkins@wang.com (Dave Jenkins) writes:
>
> The BayPac (BayCom) modem was fun, but, it is time to upgrade to a REAL TNC.

>
> I am trying to decide between asking for a PK-88, KPC-3 or DPK-2. Some of

Dave,

You might find the comparison article in the current issue of QST
helpful. My copy came in the mail on Saturday. Good luck.

73,
--

Michael Dodson Internet: dodsonm@freenet.scri.fsu.edu
2305 Forsythe Court Packet: N4JEL@N0ARY.#nocal.ca.usa.noam
Tallahassee FL 32308 USA Compu$erve: 71310,2673

926. Re: Illegal Ham Radio - Internet gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-30 14:47:57 UTC
From: kf5mg@vnet.ibm.com
Message-ID: <CHB7rx.1y80@hawnews.watson.ibm.com>
Source record: 50965
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.policy

First of all, there are at least 2 different kinds of gateways. (some gateways may handle both functions.)

1). Email Gateway that handles Internet Mail to a AX.25 BBS packet user and vica versa.

2). Real Time Internet/Ampr.Org. gateway that allows ax.25 Packet traffic to other ax.25 packet stations usign the Internet as a wormhole. These gateways will also allow Ham to Internet mail and Internet to Ham mail but they do NOT route mail to AX.25 BBSes addresses.

I'd like a clarificaion reguarding legal activities of the the 2nd type of gateway.

1). Ham sends mail to non ham via gateway.

2). Non-Ham sends mail to Ham. Ham logs on (or runs a POP Client) and reads the mail.

In both cases.... a ham station is originating a connect with a Internet gateway to either send or read/receive mail. A non-ham may have originally sent a piece of mail, but it was not sent out on a radio port until a ham made the connect and looked at it. Does anyone see any problems with this? Thanks.

73's de Jack - kf5mg
AX25net - kf5mg@kf5mg.#dfw.tx.usa.na - (817) 962-4409
Internet - kf5mg@kf5mg.ampr.org - 44.28.0.14
Worknet - kf5mg@vnet.ibm.com

927. Re: HAM-server index file

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-30 16:38:22 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1993Nov30.163822.873@ke4zv.atl.ga.us>
Source record: 50966
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc

In article <CHAI9C.A27@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu (Jeff Herman) writes:
>In article <9311292209591.gilbaronw0mn.DLITE@delphi.com> gilbaronw0mn@delphi.com (Gilbert Baron) writes:
>>Why do we WASTE bandwidth with long garbage like this list of files?
>
>Phooey on you Gil! I for one am glad to see the list of files. This
>ham-server is a gold mine of info - I've gotten so many goodies off
>that list - I would have never known what they had to offer unless
>they had posted on here.

Ditto.

Oh, oh, I'm agreeing with Jeff. Doctor, doctor, help me. :-)

Gary
--
Gary Coffman KE4ZV | Where my job's going, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | I don't know. It might | uunet!rsiatl!ke4zv!gary
534 Shannon Way | wind up in Mexico. | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -NAFTA Blues |

928. domain.txt questions

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-30 16:43:23 UTC
From: RABALAIS@symantec.com
Message-ID: <RABALAIS.3.0@symantec.com>
Source record: 50968

I'm running an older version of KA9Q, and it won't recognize any
DOMAIN.TXT entries that use CNAME. Is it not supported by older versions
or what?

Example:
n0prq IN A 44.108.5.5 <===== works

prq IN CNAME n0prq < doesn't work

Entering "telnet prq" at the NOS prompt produces "unknown host prq".
What am I doing wrong? I have the "domain suffix" set to .ampr.org
but it doesn't help!
Thanks,
rabalais@symantec.com

929. Re: Max BAUD on 6M AM & FM

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-30 17:45:39 UTC
From: jbloom@arrl.org
Message-ID: <2660@arrl.org>
Source record: 50967

In rec.radio.amateur.digital.misc, gary@ke4zv.atl.ga.us (Gary Coffman) writes:
>In article <2644@arrl.org> jbloom@arrl.org (Jon Bloom, KE3Z) writes:
>>In rec.radio.amateur.digital.misc, gary@ke4zv.atl.ga.us (Gary Coffman) writes:
>>>In article <2635@arrl.org> jbloom@arrl.org (Jon Bloom, KE3Z) writes:
>>>>In rec.radio.amateur.digital.misc, gary@ke4zv.atl.ga.us (Gary Coffman) writes:
>>>>>So you're limited to 19.6 kb *and* a maximum bandwidth of 20 kHz.
>>>>
>>>>Ah, no. What the rule says is that when you are using a specified
>>>>digital code from 97.309(a), you can send at up to 19.6 kbauds. When
>>>>you are using "any digital code" you can send within a 20-kHz bandwidth.
>>>>The first two sentences go together; the last two sentences go together.
>>>>(This was a lot more obvious before the latest rules rewrite. Old
>>>>part 97.69 contained each set of code and signaling restrictions together
>>>>in a common subparagraph.)
[deleted]
>So if I'm reading 97.307(f)(3) and (4) correctly, and what you say is
>right, then only ASCII plain text can be transmitted by packet on HF.
>That means no encapsulated network layer binary headers as TCP/IP uses,
>nor any binary file transmissions, nor compressed bulk Email transmissions
>would be allowed. Yet we know all three are routinely being done.

Anything that is part of the communication protocol isn't the data.
Whether your protocol calls for start and stop bits, 3-character units
(AMTOR ARQ), or control information, it's part of the underlying
communications protocol, *not* the data being transmitted.

>Also, what you said earlier means I can, according to 97.307(f)(5) and (8)
>transmit a J9D emission on 6 meters at a symbol rate of 19.6 kb even though
>that would be a minimum bandwidth of 49.2 kHz, maximum unspecified, as long
>as I'm using a specified code in the data fields. But if I use an unspecified
>code I can only occupy 20 kHz. Somehow I can't picture that as being what
>they meant.

Well. I *said* it doesn't make much sense. On the other hand, it's not
much less sensible than saying you're allowed 19.6 kbaud but you have to
restrict it to a 20-kHz bandwidth, which is your reading. As I said
before, the grafting of the "unspecified digital code" rules onto the
pre-existing RTTY rules left things in a muddle.

The problem is that the FCC intentionally tries to keep these rules
relatively unrestrictive (as they see it, anyway) to allow experimentation
and amateur development, while also providing assurance that policing
(self and governmental) is possible. The dichotomous nature of these
requirements is reflected in the rules, unfortunately.

Jon Bloom, KE3Z | jbloom@arrl.org
American Radio Relay League |
225 Main St., Newington CT 06111 |

930. Re: "ampr.org" for AX.25 PBBSs??? (was Re: wb7tpy gateway)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-30 20:08:35 UTC
From: hanko@wv.mentorg.com
Message-ID: <2dg983$p84@wvhpadm1.mentorg.com>
Source record: 50969

```
In article <2deokf$i3p@apple.com>, winter@apple.com (Patty Winter) writes:
|> In article <2ctpu1$h25@wvhpadm1.mentorg.com>,
|> Hank Oredson <Hank_Oredson@mentorg.com> wrote:
|> >In article <2crlmkINNoh8@network.ucsd.edu>,
|> >brian@nothing.ucsd.edu (Brian Kantor) writes:
|> >|> I would grit my teeth heavily and loudly, but
|> >|>
|> >|> wb6cyt@wb6cyt.#soca.ca.usa.na.ampr.org
|> >|>
|> >|> would be acceptable and would work when addresses were gatewayed from
|> >|> the BBS 'world' to the real internet.
|> >
|> >And in fact is what the FQDN actually is in the bbs network, we just don't
|> >usually add the top domain because it is only required at the gates ...
|>
|>
|> Do I understand correctly that the AX.25 PBBS network folks decided
|> to append "ampr.org" to their node names? That's ludicrous! "ampr.org"
|> is an Internet domain (assigned by the NIC at SRI a decade ago), and
|> should only be used in conjunction with TCP/IP stations.
|>
|>
|> Patty

You mean all those sites connected via DECNET, SNA, X.25, etc.
are not actually here on the net? I'm sooooo confused ...

Perhaps there is even more confusion between names and addresses
than I thought ... remember: a name is not an address is not
a location is not a route is not a ... well, you know !

".ampr.org" is a domain, and whatever transport protocol happens
to be used to get things from that domain to other domains is
simply totally unimportant, no matter what the "tcp/ip bigots"
happen to think.

... Hank

|>
|> --
|> ============================== Patty Winter ==============================
|> Apple contractor Internet: winter@apple.com
|> Sunnyvale, California AMPRNet: 44.4.4.50
|> "What about truth? What about reality?"
|> "What about the way the old ending tested in Canoga Park?"
|> ================================ N6BIS ================================
```

|>

--

Hank Oredson @ Mentor Graphics
Internet : hank_oredson@mentorg.com
Amateur Radio: W0RLI@W0RLI.OR.USA.NOAM

931. Re: domain.txt questions

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-30 20:31:20 UTC
From: kf5mg@vnet.ibm.com
Message-ID: <CHBno9.1y5v@hawnews.watson.ibm.com>
Source record: 50970

In <RABALAIS.3.0@symantec.com>, RABALAIS@symantec.com (Gerard Rabalais) writes:
>I'm running an older version of KA9Q, and it won't recognize any
>DOMAIN.TXT entries that use CNAME. Is it not supported by older versions
>or what?
>
>Example:
>n0prq IN A 44.108.5.5 <===== works
>
>prq IN CNAME n0prq < doesn't work
Try using:
prq IN CNAME n0prq.ampr.org.
I had to add the .ampr.org. stuff to my CNAME entries to get this to work
on my JNOS 1.10x11 system. I'm also running with the domain suffix ampr.org
but that didn't seem to apply to the CNAME entries. I can't recall if I needed
the trailing period on the ampr.org. statement or not. I do recall that it
didn't like it the first time I tried it and I had to add (or remove) the
trailing period for it to start working.

73's de Jack - kf5mg
AX25net - kf5mg@kf5mg.#dfw.tx.usa.na - (817) 962-4409
Internet - kf5mg@kf5mg.ampr.org - 44.28.0.14
Worknet - kf5mg@vnet.ibm.com

932. Re: PK-88 vs KPC-3 vs DPK-2 - Comments?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-30 20:56:19 UTC
From: kharker@bnr.ca
Message-ID: <2dgc1j$qga@crchh941.bnr.ca>
Source record: 50971
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.digital.misc

```
In article <fmitchCHA6Gu.632@netcom.com>, fmitch@netcom.com (Felton Mitchell) writes:
|> Dave Jenkins (djenkins@wang.com) wrote:
|>
|> : The BayPac (BayCom) modem was fun, but, it is time to upgrade to a REAL TNC.
|>
|> : Most of my packet operation is in TCP/IP but some is still AX-25. All of it
|> : is in VHF/UHF (HF privs yes, radios no). The option of operating "portable"
|> : is attractive for coolness and/or emergencies, but, is not essential.
|>
|> : I am trying to decide between asking for a PK-88, KPC-3 or DPK-2. Some of
|> : the relative merits that I know of include:
|>
|> : PK-88: Y Y N Y ? ? $139.95
|>
|> : KPC-3: L Y Y Y N Y $119.95
|>
|> : DPK-2: L Y N Y 2 3 $109.95
|> : ^ ^ ^ ^ ^ ^ ^
|> : | | | | | | |
|> : | | | | | | +------- HRO Price
|> : | | | | | |
|> : | | | | | +--------- Open squelch operation
|> : | | | | +------------ TNC-2 Compatible
|> : | | | +--------------- PBBS
|> : | | +------------------ WEFAX
|> : | +---------------------- Kiss Mode
|> : +------------------------ 12 Operation (L = Low power consumption)
|>
|> : 1) The guy at HRO said it does KISS Mode but it didn't say in the catalog.
|> : 2) "100% firmware compatability with TAPR TNC-2"
|> : "* TNC-2 Compatible * Runs all TNC-2proms"
|> : 3) $31.95 optional board
|>
|> : Oddly enough, the guy from HRO didn't talk up the DPK-2 at all. He said the
|> : other two would work fine but that if I wanted to do HF packet some day then
|> : I should not get the KPC-3.

I have amended your diagram to show two clarifications about the KPC-3,
which I have and have been very pleased with. The KPC-3 does have KISS mode, but
is not TNC-2 compatible. It can communicate with the terminal program at up to
9600 baud. Over the air, you are limited to 1200 baud, however, and as far as
I know, you cannot add anything to get it to go faster than that. It does
not have its own internal clock. Also, as far as I know, it cannot do HF packet.
```

(But then again, if I could afford an HF rig, I would probably be able to afford a multimode controller as well...). The KPC-3 will run for weeks on a 9V battery held inside its own case, which makes it very portable.
One personal note: the open squelch operation (also known as "software carrier detect") improves the packet throughput of my setup by about 300%. The only radio I have available is a Yaesu FT-209RH which occaisonally gets "stuck" with the squelch open and requires that I manually hit the PTT button to get it unstuck. Even when it doesn't get stuck, it seems like my packets get out a lot better with software carrier detect. Anymore, I can't imagine using the TNC without it. If I were buying another TNC, I wouldn't consider the DPK-2 without the option board, and then it becomes way too expensive...
Just my thoughts...
--
==
Kenneth E. Harker BNR "Any opinions expressed
kharker@bnr.ca Richardson, Texas, USA are solely mine and do
N1PVB (214) 684-5115 not represent BNR"
==

933. Re: ATM on Amateur Radio?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-30 22:37:55 UTC
From: davidk@merlin.dev.cdx.mot.com
Message-ID: <1993Nov30.223755.25824@merlin.dev.cdx.mot.com>
Source record: 50972

Dialups are available on ATM now. Just about
everyting will be available shortly.

Cells currently are about 50-60 bytes depending
on the implementation. Most implementations
are faulted for sending 50 bytes cells when
only say 3 bytes of data are being sent.
All implementations do not work this way,
some can truncate the cell and still deal
with a shortie saving bandwith for someone
else.
Dial-ups can connect to ATM along
with just about anything else.

934. Re: Illegal Ham Radio - Internet gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-30 22:48:32 UTC
From: dave@llondel.demon.co.uk
Message-ID: <754724912snx@llondel.demon.co.uk>
Source record: 50977
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.policy

In article <POPOVICH.93Nov30045558@prince.cs.columbia.edu> popovich@prince.cs.columbia.edu (Steve Popovich) writes:
>Mike Willis writes:
>
>> This particular case was an advertisment for used gear, definately not allowed
>> in the UK. Is it allowed in the USA?
>
>Are you guys not allowed to sell your used gear, or just not allowed
>to advertise it over the air? We are allowed to sell our gear to
>anyone, whether licensed or unlicensed, and we also have Section
>97.113 of the US Amateur Radio rules:
>
No advertising at all in the UK... section 3.3 of the UK regs:

The licensee shall:
(a) have no pecuniary interest (direct or indirect) in any operations
conducted under this licence; and
(b) except as provided by sub-clauses 1(2) and (3) and [misc exclusions]...
not use the Station for business, advertisement or propaganda purposes.....

The misc exclusions allow such 'adverts' as announcing the local club events etc. The two sub-clauses mentioned cover operation during disaster relief or at the request of the emergency services.

Some of us actually prefer packet radio with no adverts on it. Plenty of magazines for that, including some with free readers ads.

There are no restrictions on selling gear - you don't need a licence to buy transmitters, and (more stupidly) it is perfectly legal to sell gear which cannot be legally used by anyone in the UK (AM CB sets are a good example of this - UK CB is FM-only).

Dave
--

****
* G4WRW @ GB7WRW.#41.GBR.EU AX25 * Start at the beginning. Go on *
* dave@llondel.demon.co.uk Internet * until the end. Then stop. *
* g4wrw@g4wrw.ampr.org Amprnet * (the king to the white rabbit) *
****

935. Re: "ampr.org" for AX.25 PBBSs??? (was Re: wb7tpy gateway)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-30 23:28:26 UTC
From: kenji@k2r.or.jp
Message-ID: <KENJI.93Dec1082826@reseau.k2r.or.jp>
Source record: 50975

In article <2deqk5$9fn@juniper.almaden.ibm.com> enge@enge.almaden.ibm.com () writes:
|As far as Internet domains restricted to TCP/IP, I guess the UUCP
|people might take umbrage to that statement.

The domain naming system is not only for TCP/IP stations - it's
extensible for other protocols, e.g. DECnet, RSCS (BITNET), etc.

|In fact, there are a lot similarities between the dial up UUCP world
|and the AX.25 world.

Agreed.

// Kenji
--
Kenji Rikitake <kenji@k2r.or.jp> <kenji@rcac.astem.or.jp> (More available!)
Know thy libraries, and use them.
-- Geoff Collyer and Henry Spencer, "News Need Not Be Slow"

936. Shareware RTTY/FAX reception for the PC--FAQ

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-30 23:32:44 UTC
From: moisan@bronze.lcs.mit.edu
Message-ID: <2dgl6s$l1c@bronze.lcs.mit.edu>
Source record: 50898
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.shortwave,rec.radio.info

Shareware RTTY/FAX Decoding Programs for the IBM PC

Frequently Asked Questions

by Dave Moisan, N1KGH

Last Revised--28 November 1993

Many people have gotten interested in receiving RTTY and FAX transmissions with their PC's. Shareware, combined with cheap, easy-to-build hardware, has put RTTY and FAX reception in reach of anyone with a good digital portable such as the Radio Shack DX440 or Sony 2010.

Two programs have become very popular: Hamcom 2.2, a RTTY terminal program, and JVFAX 6.0, a full-featured FAX/SSTV receive program. The two programs both use an identical basic interface, so one can get started in FAX and RTTY for almost nothing. Another program, PKTMON, lets you monitor HF and VHF packet off the air, using the same hardware.

This FAQ list is divided into five sections:

Introduction
Using HamComm
Using JVFAX
Using PKTMON
General Problems

Appendix--HamComm Interface Schematic and Parts List

INTRODUCTION

** Where do I get the software?

HamComm and JVFAX are available from a number of sources on the Internet, including the Simtel mirrors (such as wuarchive.wustl.edu) and nic.funet.fi (/pub/ham/misc); look for HAMCOM22.ZIP and JVFAX60.ZIP. PKTMON 1.2 is available from nic.funet.fi.

Note that HamComm 2.2--unlike earlier versions--is no longer freeware; registration is $20. It's still a bargain.

** What are the basic system requirements?

HamComm: Fast (8 MHz) XT or better, 320K free RAM, hard disk not required.

JVFAX: 286 or better, at least 1M RAM; a hard disk is
strongly recommended. Note that JVFAX has its
own extended memory driver, which might conflict
with QEMM and other memory drivers. (Version
6.0 *does* work with HIMEM.SYS, however.)

Pktmon: 286 or better.

** What are the basic receiver requirements?

I've successfully received RTTY, fax and Packet with my
Radio Shack DX400 digital portable, and have had less
luck with CW. Receivers like that will work, but table
top radios (Kenwood, Icom and Yaesu) and ham transceivers
are much more suited for this application.

** Where can I find plans for the basic interface?

The plans are included in the documentation for both Hamcom and
JVFAX. JVFAX has schematics for both the basic interface, and
a more sophisticated interface that also receives GOES/APT
satellite pictures.

A complete schematic and parts list is included at the end
of this FAQ list.

** I don't want to build it. Can I buy a interface?

Yes. William Nolle is selling his version of the interface,
called FAXCAP, and it includes all software discussed here.
Contact him at:

William Nolle
122 Phillips Rd
Hazel Green, AL 35750

(Disclaimer: I am not affliated with William, nor am I even
a customer, but merely a friend and fellow enthusiast.)

Also, Dieter Dippel is selling an interface (with surface-
mount components) which includes JVFAX and HamComm. Contact:

Dieter DIPPEL, DF4RD
Fenitzerstr. 33
D-90489 Nuernberg
Germany

Phone: (049) 911 / 55 92 96 between
18:00 and 20:00 german local time or at weekends.
(1700-1900 UTC)

Email: UNRZ45@daphne.rrze.uni-erlangen.de

** How does the interface work?

This is a zero-crossing detection circuit, made up of a 741
connected in an open-loop configuration. For every zero-
crossing (twice a cycle), an interrupt is generated.
HamComm measures the time between successive interrupts using
the PC timer chip.

** How do I connect it to my radio?

Simply run an audio cable from the interface box to the earphone/
headset output, record output, or data output of your radio. The
Sangean 803A has a record output, and the DX440 can be modified for
same. Note that the interface needs 100 mV of audio to work,
but most rigs can easily supply this.

** Can you transmit with the interface?

Depends on the software, and how you construct the interface.
Hamcomm will send through the speaker or TxD line of the serial
port; JVFAX sends through the speaker (and the TxD line starting
with version 6.0.) Pktmon doesn't transmit at all. See the
appendix for details.

USING HAMCOMM

** How do I set up HamComm?

There's a sample configuration file in the HamComm archive, HC.CFG
which explains the numerous parameters required for the program
to run. Here are the ones you should set:

select port com<n> (Select default com port, <n=1 to 4>)

Note: COM1 and COM2 are already defined. If you need to
use COM3 or COM4, here are the "define port" statements
to use:

define port com3 iobase 0x3e8 irq 4
define port com4 iobase 0x2e8 irq 3

You don't need to do this for COM1 or COM2 unless you have
an unusal setup.

If you want HamComm to keep time in UTC, include these two lines:

set timezone UTC
set timediff 7200

The timediff parameter is the time difference between UTC and
your local time (UTC minus local), in seconds. In the
example above, timediff is set to account for U.S. Eastern Standard
Time (-4 UTC).

There are many other configuration options, all explained in
HC.CFG.

** Where can I find RTTY on HF and what does it sound like?

The ham bands are the best place to find decodable RTTY. I tune into CFH, Halifax, Nova Scotia on 4271, 6496.5 and 10536 KHz. RTTY is usually sent on the half-hour. RTTY has a "deedle-deedle" sound that you're probably familiar with if you've ever randomly tuned the shortwave bands.

If you want to know what an RTTY signal sounds like, go to the RTTY screen (F3) and try control-T (transmit on/off). Type in some text and hit ENTER. You will hear a signal from the PC speaker according to the currently selected speed, shift and center frequency.

** How do I tune RTTY?

First, hit F9 for the tuning screen and, using the arrow keys, set the center frequency to 1200 Hz. For example, if you're trying to decode the ARRL bulletins on 3625 KHz, the tuning screen should look like this:

Signal Frequency: 01### Hz

0 . . . .500 . . . .1000 . . . .1500 . . . .2000 . . . .2500 Hz
Space -> | | <- Mark
|

Center Frequency: 01200 Hz

Using the arrow keys, move the lower tuning bar between the two upper tuning bars. You may need to vary your BFO, RIT or clarifier so that the upper bars are centered on the display.

The difference between the two frequencies, or "distance" between the two upper bars is the *shift* of the RTTY signal. Hit Alt-K and select the appropriate shift--in this example, 170 Hz.

You'll know when the signal's tuned properly, because a train of square waves will appear at the bottom of the screen.

Next, hit Alt-S and select the *speed*; Ham RTTY is usually 45 baud. Outside of the ham bands, 50 and 75 bauds are most common

In HamComm 2.2, you can use the Bitlength Histogram screen to measure the speed. Hit F6--the baud rate will be indicated on the upper bit display. You won't get an accurate count on very noisy signals, however.

Note: If you're mathematically adept, you can figure out the speed yourself. Hit F8 to select the Scope and freeze the display by hitting Return. Measure the time interval of the _shortest_ peak, and calculate Baud rate = 1/t*10**-3, where t is in milliseconds.

Now, hit F3 (for Baudot), and readable text should scroll forth on
the screen. If it doesn't, hit the Tab key to toggle between
Normal and Inverted keying. If text is still unreadable, hit Alt-S
and adjust the speed.

** How do I log RTTY to a file?

Hit Ctrl-F; select the directory or file you want to save to and
hit Return. To stop logging, hit Ctrl-F again.

Here's some RTTY recorded off the air on 4271 Khz (at 0230 UTC):

avalon peninsula
east coast the bonavista peninsula only.
freezing rain warning continued for the bonavista peninsula only.
tonight..overcast. intermittent drizzle or freezing drizzle.
periods of freezing rainpm yrkwivonavista peninsula ending
overnight. winds becoming strong northerly. low zero.
friday..cloudy. patchy freezing g7+)-01vtov

** Whenever HamComm is receiving a string of numbers (like
from CFH or other weather stations), it comes in garbled.

First, turn off the Auto Unshift feature by hitting Ctrl-L;
the "L" annunciator on the bottom right of the screen should turn
off.

HamComm 2.2 has a weather broadcast mode that will automatically
decode weather synop broadcasts--the string of numbers you may
have seen. Here's a sample, again from CFH:

17:45:50 UTC end/tcf
17:45:52 UTC xxxxx 142346z
17:45:55 UTC snvd17 cwhx 142300
17:45:57 UTC bbxx [SHIP]
17:45:58 UTC 44139 [ship id]
17:45:59 UTC 14231 [day:14 UTC:2300] [Wind speed obtained from
anemometer (m/s)]
17:46:00 UTC 99443 [latitude:44.3]
17:46:00 UTC 70573 [longitude:57.3] [Latitude south, longitude west]
17:46:01 UTC 46/// [automatic] [cloud height:no data] [visibility:no data]
17:46:02 UTC /2809 [cloud cover:no data] [wind dir:280 deg, speed:9]
17:46:02 UTC 10092 [air temp:+9.2]
17:46:03 UTC 40075 [pressure at sea level:1007.5hPa]
17:46:05 UTC 57014 [pressure:decreasing] [change in 3h:1.4hPa]
17:46:05 UTC 22200 [ship direction: stationary, speed: 0 knots]
17:46:05 UTC 00082 [sea-surface temp: +8.2]
17:46:06 UTC 10805 [wave period:08 seconds, height:2.25-2.75m]
17:46:07 UTC 70023 333 [section 3]
17:46:08 UTC 91211
--- log closed Sun Nov 14 1993 18:02:36 UTC ---

(In the above example, note that the latitude is reversed
between north and south; this is a known bug.)

Hit Alt-T Y to decode SYNOP reports. Alt-T I decodes SHIP
format reports. HamComm will automatically recognize incoming reports
(prefixed with "aaxx", "bbxx" or "zczc" headers), but the Alt-T
commands are useful when you want to decode in the middle of a report
without waiting for the next one.

** I found RTTY, but Hamcom can't decode it.

A sad fact of life in the shortwave bands is that at least 3/4's
of all RTTY is encrypted, and alas, much of the unencrypted
traffic is not sent in plain Baudot. There still are many
decodable signals, but you'll need good references to find them.

** How do I decode CW?

Decoding CW is similar to decoding RTTY, except that there's only
one frequency to be concerned with. While you hear the CW,
go to the decoding screen, as below:

Signal Frequency: 01200 Hz

0 . . . .500 . . . .1000 . . . .1500 . . . .2000 . . . .2500 Hz
|
|

Center Frequency: 01200 Hz

Just move the arrows so that the lower line is lined up with the
upper and hit F2.

Here's a sample of CW copied off the air, on 4281 Khz

vvv vvv vvv cqde vcs vcs vys qsx 4 6 and 8 mhz chnl 3/4/7/8 vvv
vvv vxv cq de vcs vcs vcs qsx 4 6 and 8 mhz chnl 3/4/7/8 vvv vvv
vvv cq de vcs vcs vcs qsx 4 6 and 8 mh7 chnl 3/4/7/-.--.. vvv
vvv vvv cq de vcs vc5 vcs qsx ......- 6 und 8 mhz chnl 3/4/7/8

Note that HamComm subsitutes dot-dash marks for any character it
can't decode.

** I'm hearing CW, but Hamcom just garbles it.

There are two different problems encountered with CW decoding in
HamComm. Here's what Django, DL5YEC, author of HamComm has to say:

Problem 1: Tone detection

For many people it is obvious that an RTTY signal has two states,
usually called mark/space or high/low tone. ANY data
transmission requires at least two states for 1 bit at a time and
CW is no exception. So what are the two states for CW? They
are the tone and ... NOISE ! You may be surprised to hear that
a certain amount of noise is REQUIRED to detect that the tone
has ended.

HamComm has an indicator for the tone detector output. At the bottom of the RX window, just to the right of the WPM display, is a small white dot that jumps up and down: up = tone detected, down = no tone (noise) detected. Listen to the signal and watch the jumping dot. It should follow the signal precisely and not jump around nervously or stick to one position.

The input signal is compared to the currently selected mark/space tones. To be regarded a valid tone the signal has to stay in that range for a certain amount of time. So the behaviour of the detector mainly depends on the currently selected SHIFT.

The tone detector output as displayed by the dot is the input to the character decoder.

Problem 2: Character decoding

In theory a dash is three times as long as a dot, the gaps within a character are dot-sized and the gaps between characters are dash-sized. In reality there are short and long tones and gaps of variable size because CW is usually 'hand-made.' The speed and length ratios also change during a transmission if the operator gets tired.

HamComm keeps a floating average of the tone duration to adjust to speed changes. Overall decoding quality mainly depends on the tone detector.

As an aside, I should mention that the bouncing-dot display also works great for RTTY; just tune the receiver until the dots bounce equally between top and bottom.

** Are there any reported bugs in HamComm?

As noted earlier, HamComm 2.2 has a bug in the WX decoder where the position reports are reversed from north to south in quadrants 5 and 7.

The "send text file" function transmits some text twice when in WORD mode.

USING JVFAX

** How do I set up JVFAX?

Select "Configuration" from the menu, and you should see a Config screen. Options are set using the arrow keys to select, and the space bar, - or + to set each option. Here are the options you need to set:

Demodulator: Set to "8 bits" and "Comparator". Specify the address and IRQ according to the following table:

For: Specify IRQ: and Address:
---- --- -------
COM1 4 03F8

COM2 3 02F8
COM3 4 03E8
COM4 3 02E8

Graphics and SSTV-Graph: Set this as appropriate for your system.
Most users can specify "VGA (640x480)". If you've Super VGA, see
the next paragraph, otherwise skip ahead to "Printers".

Configuring Super VGA: You'll have to choose between 16-color SVGA
and 256-color SVGA; the latter is required if you intend to view
false-color weather pix and for resolutions higher than 800x600.

Under the menu "Customising SVGA Parameters", complete the following
items. I'll use my elderly Trident card, set to 640x400x256,
as an example.

Chipset (256-color only): Select the name of the chipset in your
SVGA card (usually in your SVGA card manual).

AH/AL: Enter the register value for the video mode you want--this
can be found, again, in your SVGA card manual. In my case, I want
640x400x256 which is mode 5Ch, entered into AL.

BH/BL: Some SVGA cards, particularly VESA-standard cards, require
this register pair as well. My card doesn't use them.

Dots Per Line:
Number Of Lines: Self-explanatory. For my Trident, I enter 640 and 400
for the values.

Aspect Ratio: This is normally set to 10000 for standard (3:4 aspect
ratio) screens such as 640x480, 800x600, etc. It is calculated with
the following formula: (Lines/(Dots * .75))*10000. My Trident is
slightly nonstandard, so my aspect ratio is:

(400/(640*.75))*10000 = 8333

The JVFAX documentation lists settings for many popular cards.

Printer: Again, set this as appropriate for your system. Most
popular dot matrix printers and the HP Laserjet are supported.
(As an example, for my Panasonic 1124, I selected "Epson 24-pin".)

Enable scrolling: This determines whether faxes will scroll
off the screen when being received. Set this to "Yes".

Default Picture Directory: Enter the disk and directory where
faxes will be stored, e.g. "C:\WEFAX".

Store Pictures in GIF 89a: JVFAX uses the GIF 89a standard to store
special information on each fax, such as mode, LPM and IOC. Unless
you're using other GIF software that can't handle this standard,
leave this enabled ("Yes").

Miscellaneous Settings: Hit Esc to enter yet another configuration menu. There are just a few settings you need to make:

Quicksave: This feature lets you save the last picture sent; it works by continuously capturing faxes to a .GIF file, which may become *very* large. Unless you have lots of hard disk space, set this "off".

Initial RX Mode: Set to "1--Wefax 576"; this is the mode that almost all weather faxes are sent in.

Disable XMS use: Set to "No". Normally, if HIMEM.SYS is loaded by DOS, JVFAX will use it to manage memory. With some DOS/BIOS/hardware combinations, this may cause problems (blank pictures, lock-ups, etc.) so you may need to disable XMS (set parameter "Yes"). This will degrade JVFAX's performance so leave this alone unless you are actually having problems.

Hit Ctrl-Enter to leave this menu. Hit Ctrl-Enter again, and you're done!

** Where do I find fax and what does it sound like?

A Fax signal will have a "scratchy wheel" sound when sending a picture, and a carrier tone when idle. It can be found easily in the maritime bands. Unlike RTTY, there are few variations, and no transmissions are encrypted that I know of.

Two stations I hear regularly on the US East Coast are NAM, Norfolk, VA on 3356, 8080 (irregular) and 10865 KHz, and CFH, Halifax, NS on 4271, 6496.5 and 10536. CFH sends faxes on the hour, generally. I've found press fax on 9242, from Buenos Aires, Argentina.

** What modes are faxes usually sent in?

Weather faxes are usually sent with an IOC (Index of Correlation--the ratio of width to height) of 576, and an LPM (Lines Per Minute) of 120. Press faxes, the few I have found, use an IOC of 288 and an LPM of 60.

** OK, I'm hearing it. How do I tune in?

Using NAM, 10865 KHz as an example, follow these steps:

1) From the JVFAX main menu, hit F (Fax), and you'll be shown a blank screen with a tuning indicator and a menu box on the bottom of the screen.

2) Select the mode by hitting 1 ("Wefax 576").

3) Set the deviation to 400 by hitting the D key till it comes up.

4) Using your BFO, RIT or clarifier, tune the signal (in lower sideband) until you see a peak on the tuning indicator. Tune this peak towards the W (white) end of the scale (This will normally be 1.9 Khz below the center frequency, in this case 10863.1 Khz.) The indicator should look like this:

```
! <- Signal
! peak
! should
. . . .. .. .. . . ##! be here
----------------------------------------
B W
```

5) Hit A (APT); it should read "Running" and you should start to see a fax appear on the screen! To stop recieving, hit A again.

NOTE: If you have selectable filters on your receiver, set them to "wide" or "FAX" and set the RF gain as high as possible without overloading.

** I don't get a fax, or I get something garbled.

Check the mode; most fax transmissions use "Wefax 576", mode 1 in the program. The LPM should be 120. Check your connections to the interface. If that's in order, you may have an RFI or interrupt problem (see questions in "General Problems").

** I get a fax, but it comes out slanted.

Hit / and a line will appear; use the arrow keys to tilt and move the line so that it's lined up with a line on the fax (such as a border or a chart line). Hit Return, and the fax should now come in straight. Note that this is a permanent adjustment, and you shouldn't need to fix this ever again, no matter what faxes you subsequently receive.

** I get a fax, but it's not aligned with the edge of the screen.

Hit R (Rotate) and move a line with the arrow keys to the left edge of the fax (there'll be a black bar where the fax is supposed to start.) Hit Return and the fax should now be properly aligned.

** My fax is negative!

You're receiving the fax on the wrong sideband; try the other sideband. Most faxes are sent in LSB. A few press stations transmit negative pictures (JVFAX can be set to fix this; see the docs.)

** My fax is too dark.

** My fax is too light.

Your receiver is mistuned. If the fax is too dark, tune towards the white end of the tuning scale (peak moves towards W). If the fax is too light (washed out), tune towards the black end of the tuning scale (peak moves towards B).

Also, make sure the deviation is set correctly--at 400 for most faxes. This is especially important for receiving the GOES satellite images that NAM and other stations send.

** I started receiving a fax, but JVFAX stopped it (APT "waiting").

When reception is noisy or weak, JVFAX often interprets a noise burst to mean "end of picture". Hit A again to restart receiving. If this happens more than once, you probably won't get a very good fax anyway.

** How do I save a fax to disk?

While you're not receiving a fax (APT "waiting"), the S key will toggle the save-file option on and off. Faxes will be saved in .GIF format to the disk and subdirectory you specified in the configuration screen.

** I enabled Save to File, but when I hit A to start a fax, the Save feature turned off.

Go to the configuration screen (C from main menu) and check the save file specification. JVFAX won't save to a file if there's a typo (like "C:\\JVFAX") but it won't notify you of the error either.

** How do I print a fax?

Two ways:

1) While you're in the fax receive mode and not receiving a fax (APT "waiting"), P will enable your printer; it's a toggle, so hit P again to disable printing.

NOTE: You cannot have both Save to File and Print options enabled at once. Also, once the fax is printing, the Rotate command will not work on the printout.

2) Hit H (Show and Send Pictures). Select the fax you want to print. When it appears on the screen, hit P. JVFAX will ask how much width it will print in (0-100%); hit Return for the default (100%).

** The GIFs I save are too big! How do I shrink them?

It's not uncommon for weather faxes to be very large, especially if you regularly pick up 16-shade GOES images over NAM (a recent GOES fax from them "weighed in" at 870k!)

There are several methods you can use to shrink the size of your GIFs:

1) You can crop them. From the main menu select H (Show and Send Pictures); from the directory listing, select the file you want to crop. The fax will show up on the screen--select the Z (Zoom) option. Use the arrow keys to move the zoom box (which is about the size of a regular 640x480 VGA screen), and the X, Y, + and - keys to resize it. Hit Return and the cropped image will fill the screen. Hit S to save it (under a different name.)

2) You can reduce the resolution on faxes to be received. Most faxes (of the Wefax 576 variety) have a resolution of 1810x 1000, which makes for beautiful printouts, but is overkill if you're just using a GIF viewer.

To fix this, go into the Mode Editor (M from the main menu) and select the mode you normally use (e.g. Wefax 576). Step through the options with the arrow keys and select Resolution. For Wefax 576, it'll normally be 1810. Enter a smaller value (800 is OK) and hit Return.

If you're only interested in charts and not satellite images, select the Grays option and set the number of shades to 2 (B&W only--no gray scale). Your GIFs should be much smaller, though at a significant loss of resolution. (That being said, I once saved some GOES images from NAM for a friend of mine in 800x600x4 and they still looked good.)

** I get an all-white/all-black signal, no matter what signal is coming in on the receiver.

** I get horizontal white/black bands on my pictures.

** I get a white peak on the tuning indicator that doesn't move.

Either your audio cable to the interface is broken, or you have an interrupt conflict between serial ports. If it's the latter you may need to move the interface to another port.
(See "General Problems" for more on troubleshooting this.)

USING PKTMON

Unlike HamComm and JVFAX, Pktmon has few options and is simpler in scope. Using the same interface, Pktmon will decode HF and VHF packet. Pktmon can log to a file, and will optionally keep track of packets, assembling them into separate files for you. Note that the program is receive-only.

While it will never approach, let alone replace, Baycom or a TNC, I've been delighted with its very ingenious attempt at implementing AX.25 in software, and have found it a surprisingly fair performer. It even comes with source code (Turbo Pascal) for implementing your own projects with the interface!

There isn't much to running Pktmon, so here's a quick rundown through the prompts.

"COM 1 or 2?" Self-explanatory.
Pktmon doesn't support COM3 or COM4.

"Packet type?" Enter 1 for HF packet or 2 or 3 for VHF packet.
I've never noticed a difference between the latter
two options in use.

"Log bad packets?" If you answer Y, packets with CRC errors will
printed, otherwise, not. I usually choose to
log them.

"File to log all packets"

Self-explanatory. If you don't specify a file,
packets will go on the screen.

"File to log sorted packets"

Enter a filename, _no extension_. Pktmon will
sort packets to the files <n:filename.#>, #=
0 to 9. It also creates a file <n:filename.OTH>
for uncategorized packets such as beacons.

That's it. Pktmon will start decoding packets until you hit Return.
There's a tuning indicator on the top of the screen that indicates
activity. Here are some sample unsorted packets copied off the air
on 14099 Khz around 2300:

Started Logging on 1993-04-16 at 18:00:11
[...]
18:03:00 => CQ -0 WA2GGI-0 Ctrl:03 [UnAck Info] Pid:F0
Data: #0D
18:03:11 => K4YPE -0 WA2GGI-0R Ctrl:73
18:03:13 => K4YPE -0R WA2GGI-0 Ctrl:00 [Data, seq 0] Pid:F0
Data: **HI BOB IN BOCA RATON FL.BUSY NOW PLEASE LEAVE MESSAGE
ON MAILBOX TNX.#0D
18:03:23 => K4YPE -0R WA2GGI-0 Ctrl:04 [Data, seq 2] Pid:F0
Data: ,RM,S, or Help >#0D
18:03:35 => K4YPE -0 WA2GGI-0R Ctrl:73
18:03:38 => KB7HJM-0 WA2GGI-0 Ctrl:63
18:03:41 => KB7HJM-0 WA2GGI-0 Ctrl:00 [Data, seq 0] Pid:F0
Data: **HI BOB IN BOCA RATON FL.BUSY NOW PLEASE LEAVE MESSAGE ON
MAILBOX TNX.#0D
[...]
82 total frames received and 6 good ones + 3 CRC errors
Stopped logging on 1993-04-16 at 18:20:42

It's rather like reading the news on an RS232 service monitor,
isn't it? :) Note that control characters are depicted as "#cc".

Now, here are some sorted packets:

****** File open at 18:03:16 on 1993-04-16 for
WA2GGI-0 => K4YPE -0 traffic

**HI BOB IN BOCA RATON FL.BUSY NOW PLEASE LEAVE MESSAGE ON MAILBOX
TNX. [1 lost pkts] ,RM,S, or Help >
****** connection inactive for 5 minutes
****** File closed at 18:09:02 on 1993-04-16
****** File open at 18:13:28 on 1993-04-16
for KC4FS -0 => W1DXQ -0 traffic

Phone call Jack. Please wait...

****** connection inactive for 5 minutes

Now, the questions:

** Where do I find packet and what does it sound like?

On HF, packet can be found mainly at the lower end of 20 meters
(14090-14150 usually) and in the 30 meter band (10100-10150 Khz).
VHF packet can be found on 145.01, 145.03, 145.05, 145.07 and
145.09, among other places. It has a "braaaap..." sound quite
unlike RTTY.

** How do you tune in packets on HF?

On the upper edge of the screen, there's an "A" scale. While
hearing packets, tune VERY carefully until the scale reads 6 or
higher. Pktmon expects a tone frequency of about 1000 Hz.

** I'm logging sorted packets, but they're missing linefeeds.

You'll have to go into your favorite ASCII word processor and
have it insert linefeeds. I usually copy all the <n:filename.#>
files into a single file and fix it there.

** I'm getting lots of CRC errors.

On HF, this is, sadly, normal. Packet is just not well suited
to a ever-changing ionosphere, and it's marvelous that it works
at all. (When I copied the sample text, the ionosphere was
very quiet, an unusual occurence as I'm writing this.)

On VHF, on the other hand, CRC errors may be a result of Pktmon
being unable to keep up with transmission. 1200 baud is near
the limit for this type of interface. I've also found that with
my setup (in an apartment), I seem to be prone to multipath
and other VHF anomalies that disrupt reception, especially
of packet.

** The program locks up on me when receiving lots of packets!

If there's too much activity on the air, or the receiving tone
frequency is too high, Pktmon tends to lock up, as it can't
"follow" the signals fast enough. This has been reported by
several users on Fidonet.

According to the author, Pawel Jalocha, if Pktmon takes a long
time to terminate upon hitting Return, your machine may be

too slow.

GENERAL HARDWARE PROBLEMS

** Can I use EMM386/QEMM or other memory managers with HC, JVFAX or PKTMON?

Generally, no. HamComm, JVFAX and PKTMON are interrupt-intensive and use up most of the CPU cycles. That's the price you pay for having the demodulation and decoding done in software (rather than in a TNC). JVFAX comes with its own memory manager, anyway.

Note: While JVFAX 6.0 and HIMEM.SYS seem to work fine, if you have interrupt problems (blank pictures, streaks), try removing "DEVICE=HIMEM.SYS" and "DOS=HIGH" statements from your CONFIG.SYS before using JVFAX. I've not seen any problems with HIMEM and HamComm or Pktmon.

If you regularly use EMM drivers, Windows or Desqview, make up a minimal boot disk disabling all such programs, before running HamComm, JVFAX or PKTMON.

** I can't seem to receive freqs. higher than 100 Hz on the HamComm tuning screen.

The interface may not be receiving enough power from the serial port to operate. Modifications for a battery-powered interface are in the appendix.

** I get noise from my computer--HELP!

One of the most difficult problems in linking PC's with radios is RFI. It's beyond the scope of this FAQ list to cover every possible contingency, but here are some suggestions:

1) Keep your computer and your antenna *well* separated from each other and use good, well-shielded, coax for the lead-in.

2) The HamComm interface should be *shielded*--use a metal or foil-lined box. Use good shielded cable for both the audio and data connections.

3) Use RFI toroids (available at Radio Shack) on all cables.

4) Install 0.1 uF capacitors from the DTR and RTS lines to ground.

5) Install an audio isolation transformer between HamComm and the radio. (Radio Shack #273-1374).

6) Make sure the monitor, printer and their connecting cables are well shielded. Monitor noise is very common, as is printer noise.

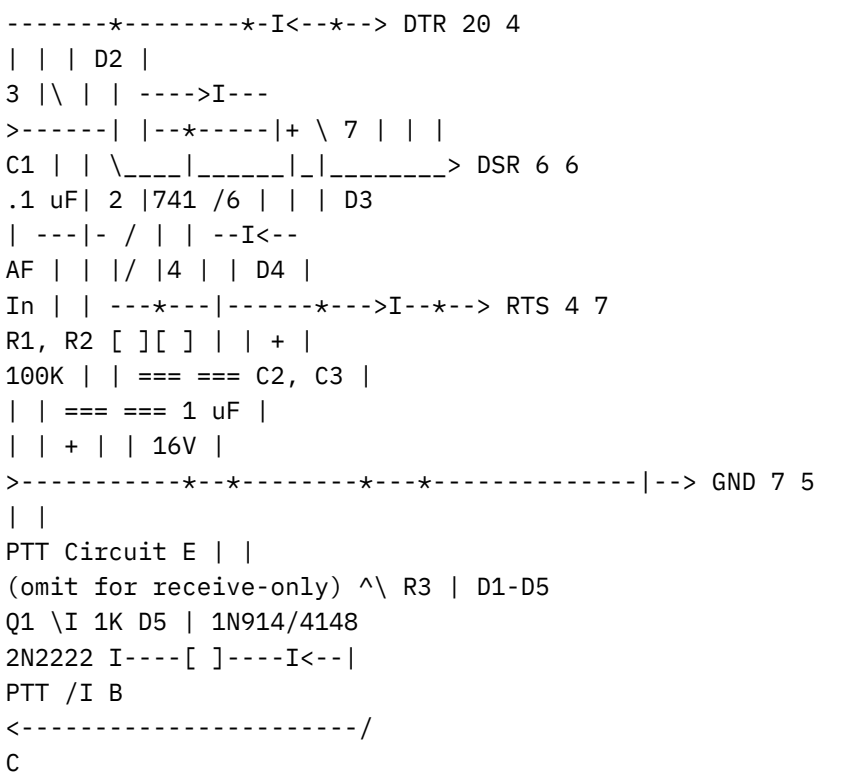
In my case, I had to do all of those steps. My 286 PC was feeding RFI back through the earphone jack of my radio), *desensing* it (ouch!) I never got all the RFI out, but I reduced it considerably so that I only get a slight increase in background noise on a few frequencies.

APPENDIX -- THE HAMCOMM INTERFACE SCHEMATIC

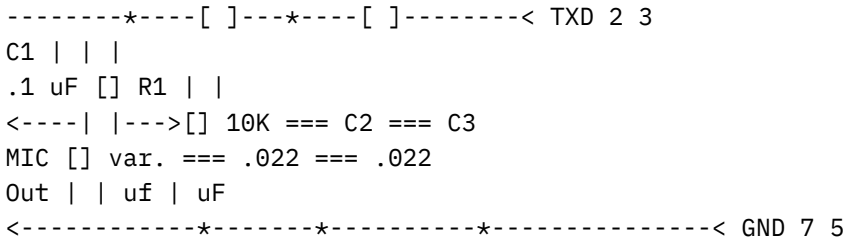
Here's a schematic of the HamComm interface, reproduced with permission:

HamComm 2.0 Receive Circuit
Copyright (c) 1990, 1991 by W.F. Schroeder

RS232 25pin 9pin



RS232 25pin 9pin
Transmit Audio Circuit R2 R3
(omit for receive-only) 15K 15K



Battery Power Modification

```
+ ! + !
To Pin 7 of IC1 <--------!!---!!--------> To Pin 4 of IC1
! !
B1 (9V) B2 (9V)
```

Disconnect D1, D2, D3, D4, C2 and C3.

NOTE: HamComm sends RTTY through the COM port's TxD line, as well as the speaker. See the HamComm docs for more details.

If you're just interested in receive, omit the PTT and transmit audio circuitry.

None of the parts are critical, so raid your junkbox! Prices for equivalent Radio Shack parts are given for reference--which you can beat by judicious shopping/scrounging.

Parts List -- Main Circuit

Part Value Radio Shack # Price (1994 catalog)

C1 0.1 uF 272-135 $0.69 (for 2)
C2, C3 1 uF 16 V 272-1434 $0.59 each
D1-D4 Diode, 1N914 276-1122 $1.19 (for 10)
*D5 Diode, 1N914 276-1122
IC1 Op amp, 741 276-007 $0.79
R1, R2 100K 271-045 $0.39 (for 2)
*R3 1K 271-023 $0.39 (for 2)
*Q1 Trans. 2N2222 276-2009 $0.59

* Not needed for receive-only interface

Parts List -- Transmit Audio Filter

Part Value Radio Shack #

C1 .1 uF 272-135 $0.69 (for 2)
C2 .022uF 272-1066 $0.69 (for 2)
C3 .022uF 272-1066
R1 10 K var. 271-282 $0.49
R2, R3 15 K 271-036 $0.39 (for 2)

Miscellaneous:

Enclosure (RS #270-239 recommended, $2.19), PC board (RS #276-170, $2.79), audio jack (RS #274-316, $2.19 for 4), RFI toroids (RS #273-104 $7.95 for 2), DB-9 connector (RS #276-1536, $1.29), audio cable, plug to match radio.

If you buy all Radio Shack parts for the converter, it should cost $15 for the full circuit (plus transmit portion), not including the RFI toroids. Again, the circuit is not really critical--if you have any parts lying around that fit, use them!

SOME RTTY AND FAX FREQUENCIES

Here's a short list of RTTY and FAX frequencies heard around the world. It's nowhere near complete, but it'll get you started. These are mostly meteorological stations, with some press stations thrown in.

All FAX stations have a LPM and IOC of 120 and 576 unless otherwise noted. All frequencies are in KHz:

Station Frequencies Comments
------- ----------- --------

CFH, Halifax, NS Canada 4297, 6496.5, 10536, RTTY 75 baud/850 Hz
13510 FAX 120 LPM/576 IOC

NMN, Portsmouth, VA USA 3357, 10865 FAX

NPG, San Francisco, CA 6453, 9090 FAX

IMB55, Rome, Italy 8146.6 FAX

NPM, Pearl Harbor, HI 4855, 9390, 21839 FAX

KCNA, North Korea 8020, 8152, 10524, Press RTTY and FAX
10580, 11430, 11476, LPM 60/IOC 288,
11536, 13580, 14452, negative
14568, 14580, 15633

ECA7, Madrid Meteo 3650, 6918, 10250 FAX

GFA, Bracknell, U.K. 2618.5 4610, 8040, FAX
14436, 18261

Bracknell, U.K. 4488 RTTY wx
50 Baud/425Hz shift

Quickborn, FRG 4583 RTTY wx
50 baud/425Hz shift

USAF, Offutt AFB, NE 3232, 6905, 11121, FAX
19327

AXM32, Melbourne, Aus. 5100 FAX

AXM34, Melbourne, Aus. 11030 FAX

AX134, Darwin, Aus. 10555 FAX

XINHUA, China 14453 Press RTTY
50 Baud/425 Hz shift

TANJUG, Serbia 5240, 7592, 7658, Press RTTY
7806, 7996, 11604,
12212.5, 13440,
15705, 16343, 20204

MAP, Morocco 7842.4, 14760, Press RTTY
15654.9, 18220.9,
18265, 19171.1

Diarios y Noticias, 8167.5, 9242, 11451 Press FAX
Buenos Aires LPM 60/IOC 288, negative
2100-0000 UTC

W1AW, Newington CT, 3625, 7095, 14095, RTTY 45 Baud/170 Hz shift
USA 18102.5, 21095, 28095

There's now a database program of weather fax stations, WXFAX,
that contains information on 101 stations on 312 frequencies,
which may be sorted and printed in any order; it also includes
sample faxes. A demo copy can be found on nic.funet.fi, directory
pub/dx/software/msdos/misc, file WXFAX.LZH.

CLOSING COMMENTS

This FAQ list was the inspiration of myself and many others on the
Fidonet SHORTWAVE echo, who have been using and experimenting with
HamComm and JVFAX for over six months, trading ideas and hints along
the way. When more people asked me for help, there and on the
Internet, I thought of the obvious and wrote this! <g>

The following get credit for lending me a hand:

W.F. Schroeder (DL5YEC), Pawel Jalocha (SP9VRC), Reid Kelly,
John Palaima (N1NIG), William Nolle, Tom Carney (WB9RJX),
Ken McKenzie, Derek Buchler, Stephen Lee, Marius Rensen and many
others not cited here.

More questions?

If anyone has questions or comments or even flames, drop me a
line! My address(es):

Internet: moisan@bronze.lcs.mit.edu
n1kgh@amsat.org

Fido: 1:101/165

Snailmail: David Moisan
86 Essex #204
Salem, MA 01970

73's and Good Listening, Dave, N1KGH
--
| David Moisan, N1KGH /^_/^\ moisan@silver.lcs.mit.edu |
| 86 Essex St. Apt #204 (o ^ o) n1kgh@amsat.org |
| Salem. MA 01970-5225 | | ce393@cleveland.freenet.edu |
| |

937. Re: Illegal Ham Radio - Internet gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-11-30 23:33:09 UTC
From: kenji@k2r.or.jp
Message-ID: <KENJI.93Dec1083309@reseau.k2r.or.jp>
Source record: 50976
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.policy

In article <CHB7rx.1y80@hawnews.watson.ibm.com> kf5mg@vnet.ibm.com (Jack Snodgrass) writes:
|In both cases.... a ham station is originating a connect with a Internet
|gateway to either send or read/receive mail. A non-ham may have originally
|sent a piece of mail, but it was not sent out on a radio port until a ham
|made the connect and looked at it. Does anyone see any problems with this?

I see no problem - but I'd prefer just logging to manned screening for
each message. It's simply absurd to force human inspection for all
messages getting through the gateway.

// Kenji

--
Kenji Rikitake <kenji@k2r.or.jp> <kenji@rcac.astem.or.jp> (More available!)
Know thy libraries, and use them.
-- Geoff Collyer and Henry Spencer, "News Need Not Be Slow"

938. Re: Illegal Ham Radio - Internet gateway

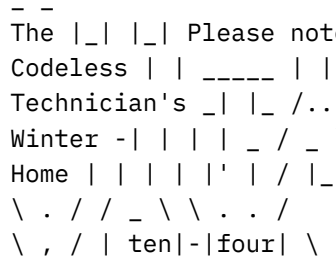
Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-01 00:32:11 UTC
From: robert@amanda.jpunix.com
Message-ID: <cosuDc2w165w@amanda.jpunix.com>
Source record: 50983
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.policy

popovich@prince.cs.columbia.edu (Steve Popovich) writes:

> Mike Willis writes:
>
> > This particular case was an advertisment for used gear, definately not allo
> > in the UK. Is it allowed in the USA?
>
> Are you guys not allowed to sell your used gear, or just not allowed
> to advertise it over the air? We are allowed to sell our gear to
> anyone, whether licensed or unlicensed, and we also have Section
> 97.113 of the US Amateur Radio rules:
>
> (Section) 97.113 Prohibited transmissions.
>
> (a) No amateur station shall transmit any communication the purpose of
> which is to facilitate the business of commercial affairs of any
> party. No station shall transmit communications as an alternative to
> other authorized radio services, except as necessary to providing
> emergency communications. A station may, however, transmit
> communications to:
>
> (1) ...Deleted as irrelevant...
>
> (2) Inform other amateur operators of the availability of apparatus
> normally used in an amateur station, including such apparatus
> for sale or trade. This exception is not authorized to any
> person seeking to derive a profit by buying or selling such
> apparatus on a regular basis.
>
> (b) ...This and subsequent subsections have also been deleted as irrelevant..

Why not delete all of 97.113 as irrelevant, and start selling
transceivers to taxicab and wrecker drivers.

--Robert



```
_________________| . |____|____| |____|____| , |_____________________
```

939. Re: ATM on Amateur Radio?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-01 00:38:43 UTC
From: peterson@ux1.cso.uiuc.edu
Message-ID: <2dgp2j$s68@vixen.cso.uiuc.edu>
Source record: 50973

It was my understanding that since ATM does not include any frame sequencing information, using it on a radio link raw would be non-advantageous at best, since if a packet was lost it could not be recovered. Do I understand this right? I was under the impression that ATM's main purpose is a standard for encapsulating information inside other error-correcting frames such as X.25 etc.

davidk@merlin.dev.cdx.mot.com (David Kirkpatrick) writes:

>Dialups are available on ATM now. Just about
>everyting will be available shortly.
>Cells currently are about 50-60 bytes depending
>on the implementation. Most implementations
>are faulted for sending 50 bytes cells when
>only say 3 bytes of data are being sent.
>All implementations do not work this way,
>some can truncate the cell and still deal
>with a shortie saving bandwith for someone
>else.
> Dial-ups can connect to ATM along
>with just about anything else.
--
We're just two lost souls swimming in a | If the University saw things my
fish bowl, year after year. Running over | way, they wouldn't raise tuition!
The same old ground, what have we found? | Andy Peterson, N9NTI /--/--/
The same old fears.. wish you were here.. | "I only do code in C." |

940. MICOR on 9.6kbaud packet?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-01 00:41:19 UTC
From: peterson@ux1.cso.uiuc.edu
Message-ID: <2dgp7f$sa9@vixen.cso.uiuc.edu>
Source record: 50974

I'm trying to get a 9600 baud packet station on the air, and want to know if I can modify/use a Motorola MICOR UHF (460 band) radio on 9.6k packet. Is there anyone out there who has had a good/bad experience in trying to do so? I have a Micor service manual on the way, but would like some 'real-world' input. Thanks in advance and 73
Andy N9NTI

--
We're just two lost souls swimming in a | If the University saw things my
fish bowl, year after year. Running over | way, they wouldn't raise tuition!
The same old ground, what have we found? | Andy Peterson, N9NTI /--/--/
The same old fears.. wish you were here.. | "I only do code in C." |

941. Welcome to rec.radio.info!

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-01 04:01:46 UTC
From: rec-radio-info@ve6mgs.ampr.ab.ca
Message-ID: <rec.radio.info-welcome_754718490@ve6mgs.ampr.org>
Source record: 50899
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.shortwave,rec.radio.cb,rec.radio.noncomm,alt.radio.scanner,rec.radio.info,news.answers,rec.answers

```
Archive-name: radio/rec-radio-info/welcome
Last-modified: $Date: 1993/05/16 21:57 $
Version: $Revision: 1.05 $

*** Welcome to rec.radio.info! ***

Welcome to rec.radio.info, a group that aims to provide a noise-free source
of information and news for the entire rec.radio hierarchy.

Two introductory articles about rec.radio.info are posted to the group and
to news.answers every two weeks. You are now reading the first article, which
explains what rec.radio.info is, and answers some Frequently Asked Questions.
The second article is titled "Submission Guidelines", and you only need to
read it if you want to submit an article to rec.radio.info.

You can skip to the next section of this article by searching for the next
" -- " string. The sections available are:
- What is the purpose of rec.radio.info?
- Why are messages almost always cross posted to rec.radio.info?
- What is a 'follow-up', and what does 'moderated' mean?
- OK, so now I know what 'moderated' means. Tell me more.
- What type of material is considered inappropriate?
- I do not have access to news, how can I get the information posted to
rec.radio.info?
- Will the material appearing in rec.radio.info be archived somewhere?
- I have a regular posting with timely information, is there a way to
speed up it's delivery, or automate for more convenience?

-- What is the purpose of rec.radio.info?

The purpose or charter of rec.radio.info is to provide the Usenet community with
a resource for information, news, and facts about any and all things radio.

All the other rec.radio groups are intended for discussions and general chit
chat about radio. Rec.radio.info will contain informational, factual articles
only. Follow-ups are redirected to an appropriate other group, and further
discussion (if any) will not take place in rec.radio.info.

In order to ensure that rec.radio.info contains only appropriate articles, it
was decided to create the group as a moderated newsgroup.

-- Why are messages almost always cross posted to rec.radio.info?

It provides a "tag" for each article to be assembled into a filtered
presentation in rec.radio.info (even with cross-posting, only one message, with
```

a unique Message-ID, is propogated across the net). This tag also facilitates a pre-existing method of dropping or cancelling the articles locally within the discussion groups if you don't want to see them. This accommodates individuals who want to separate the bulletins from the discussions, discussions from the bulletins, as well as those who are adamant about not reading another newsgroup and wanted to see everything all in one basket.

With the total size of Usenet (in number of newsgroups and total traffic) doubling every year or so, this is no insignificant contribution to reducing information noise and chaos. Making the discussion groups a catch-all, and making extra newsgroups filters on that catch-all, is also the most realistic way to implement such a scheme (It's not intuitively obvious what the charter, contents, and general appropriate topics for each and every newsgroup are. Seeing FAQ's and charter/intro postings in the home newsgroup is beneficial for new readers).

By cross-posting one only is adding a few tens of bytes to each bulletin (to specify the extra group on the Newsgroups line), but are adding the capability for very powerful filtering features available on most news servers, listservers and readers. Your local news guru could probably explain these features in more detail.

In rn, for example, according to Leanne Phillips in her rn kill-file FAQ, add a line of the form:
/Newsgroups:.*[,]rec\.radio\.info/h:j
either in ~/News/KILL (if you don't want to see rec.radio.info articles anywhere) or ~/News/rec/radio/amateur/misc/KILL (if you don't want to see them just in rec.radio.amateur.misc). The latter method means your kill file will only be consulted during rec.radio.amateur.misc (and hence runs more efficiently), and will probably work for most people.

In nn, according to Bill Wohler in his nn FAQ, add a line of the form:
rec.radio.info:!s/:^
in ~/.nn/kill (if you don't want to see rec.radio.info articles anywhere), or put the following lines:
sequence
rec.radio.info
rec.radio.
at the end of ~/.nn/init in order to see all the rec.radio.info bulletins first, then read the remaining rec.radio.* without the bulletins.

-- What is a 'follow-up', and what does 'moderated' mean?

If you are new to Usenet and are not familiar with the terminology, you might want to read the general introductory articles found in the newsgroup news.announce.newusers. Doing so will make your life on the net much easier, and will probably save you from making silly beginner's mistakes.

If you think that at this moment you are reading an echo, a conference, or a bulletin board, I'd also strongly suggest a trip over to news.announce.newusers.

For the rest of this article, I will assume you have a basic knowledge of Usenet terminology and mechanics.

A moderated group means that any article that needs to be posted to the group has to be accepted by the moderator of the group. Since we need to ensure that followups to an article (discussion) do not show up in the rec.radio.info newsgroup, the `Followup-To:' header line contains a newsgroup that is appropriate for disussions about the specific article.

-- OK, so now I know what 'moderated' means. Tell me more.

Rec.radio.info is a moderated newsgroup, which means that all articles submitted to the group will have to be approved by the moderator first.

The current moderator of the group is Mark Salyzyn. Submissions to rec.radio.info can be posted, or e-mailed to:

rec-radio-info@ve6mgs.ampr.ab.ca

Comments, criticisms, suggestions or questions about the group can be e-mailed to:
rec-radio-request@ve6mgs.ampr.ab.ca

But before you do so, please be sure to check out the "Submission Guidelines" article.

The influence of the moderator should be minimal and of an administrative nature, consisting chiefly of weeding out obviously inappropriate articles, while making sure correct headers etc. are used for the appropriate ones.

-- What type of material is considered inappropriate?

There are three broad categories of articles which will be rejected by the moderator:

1) Requests for information: rec.radio.info is strictly a one-way street. I receive information in my mailbox; I then post it to rec.radio.info. Requests for specific information belong in the normal discussion newsgroups. If your request gets answered, you might consider passing the answer on to rec.radio.info, though. Especially if you can edit it into a informational, rather than a discussion, format.

2) Obvious discussion articles, or articles that appear unsubstantiated.

3) Commercial stuff: a relatively unbiased test of a radio product would be accepted, but any hint of for-profit might be reason for rejection. For three reasons: This is not the purpose of the list, for-profit is a controversial topic, and this list may be passed onto Amateur Packet Radio (where for-profit is prohibited except under certain provisos).

rec.radio.swap (or possibly comp.newprod) may be more deserving of the posting in any matter.

Similarly, copyrighted material generally cannot be used. If it's TRULY worthwhile to the net, I would recommend obtaining permission from the copyright holder. Please note the source, and if permission was given. I

reserve the right to make the final decision concerning appropriateness in all situations. In most cases, a brief summary of, or pointer to, the copyrighted information may be all I can allow.

-- I do not have access to news, how can I get the information posted to rec.radio.info?

brian@UCSD.EDU (Brian Kantor) has kindly supplied a mail list server for rec.radio.info. Non of the articles will be digested, due to their size, so you will receive individual mailings for every article posted to the group.

Mail sent to radio-info@ucsd.edu will be forwarded to the moderator and thus is an alias to rec-radio-info@ve6mgs.ampr.ab.ca

To subscribe and unsubscribe via the listserver; the format for that is

sub address radio-info
unsub address radio-info

where 'address' is your full mailing address. Send this request to

listserv@ucsd.edu

Note that the server will automatically delete any address that bounces mail. If you leave the address portion blank, it will try to deduce your address from the mail headers. This may not work if you are on bitnet, milnet or some other non-Unix host, so it is recommended to put your return address in any case. For example:

sub mymailbox@myhost.mydomain.mil radio-info
or
sub MEMEME01@DMBHST.bitnet radio-info

or something like that.

-- Will the material appearing in rec.radio.info be archived somewhere?

Yes. Still firming up details at the moment but here is a preliminary list:
- unbc.edu as maintained by Lyndon Nerenberg <lyndon@unbc.edu>
- nic.funet.fi maintained by Risto Kotalampi <rko@cs.tut.fi>
saved to /pub/dx/text/rec.radio.info currently stored as numbered files.

Effectively this means that anything you post to rec.radio.info will be permanently stored, so your work will not be lost.

-- I have a regular posting with timely information, is there a way to speed up it's delivery, or automate for more convenience?

Yes, there is! It may take a bit of chatter with the moderator, but we are willing to take responsible people and provide them the means of posting the articles directly from their site. We will try everything we can as we fully realize that DX (distant signal) and astronomical data can be somewhat transitory. We are also willing to allow regular posters of information the same courtesy, even if the information is not as time critical.

We refer to this as self-moderation, which is partly based on the model for news.answer. This requires co-operation and good will to be beneficial to the community in the rec.radio hierarchy.

I suggest reading the posting guidelines for more information. I am open to suggestions.

I thank the following individuals for their input into this article:
rec.music.info moderator Leo Breebaart rec-music-info@cp.tn.tudelft.nl
rec.radio.broadcasting moderator Bill Pfeiffer wdp@gagme.chi.il.us
Paul W. Schleck, KD3FU pschleck@unomaha.edu
Ian Kluft, KD6EUI ikluft@uts.amdahl.com

--
Mark Salyzyn -- Moderator rec.radio.info
Submissions to: rec-radio-info@ve6mgs.ampr.ab.ca
Administrivia to: rec-radio-request@ve6mgs.ampr.ab.ca
* Requests for information do *not* belong in rec.radio.info *

942. Re: HAM-server index file

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-01 06:47:29 UTC
From: ka6etb@GRAFex.sbay.org
Message-ID: <u20uDc2w165w@GRAFex.sbay.org>
Source record: 50978
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc

gilbaronw0mn@delphi.com (Gilbert Baron) writes:

> Why do we WASTE bandwidth with long garbage like this list of files? The
> place for that is in a data base somewhere. If you want this list you should
> ftp it or have it emailed to you. IT DOES NOT BELONG on the newsgroup taking
> up an obscene amount of space.

Get up on the wrong side of bed, did we?

Most of the HAM-server requests come with two days of the posting of the
index. Seems to me that some folks are getting good use of it.

It if aggravates you so, put HAM-server in your kill file.

I do apologize, however, for the duplicate posts of the index. It was
a case of my scheduler going awry.

73 de KA6ETB

943. KPC-3: Remote Station Gets 'Busy' Replies??

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-01 08:44:03 UTC
From: AllanWS@cup.portal.com
Message-ID: <97124@cup.portal.com>
Source record: 50979

This problem is making me lose more hair than I have on my head!

I have a KPC-3 TNC which I use to connect to the local PacketCluster.
The cluster sysop set up a script where if the path between the cluster
and my location drops and I retry out, the cluster will attempt to reconnect
to my TNC. This is how I discovered the 'problem'...
With the computer off (a 386 clone), leaving the TNC/radio on, a station
cannot connect to my TNC. They receive a ***busy on their end and I get
a *** connect request! Note that the remote station is not trying to
access the KA-Node or the mailbox; he is just trying to connect to my
normal user ID. When I turn the computer on and boot up my packet software,
I get a buffer full of *** connect requests as well as other channel
traffic. Stations can now connect to me. It seems that I must keep the
computer on with terminal software loaded up but this does not seem right.
I have been involved with packet for 3 years and have used the MFJ-1278
with no problems. In fact, I cannot reproduce this problem with the
MFJ. Some locals suggested CTS/RTS hardware flow control might
be at fault here. I have my USERS set at 10 /MAXUSERS at 10 btw.
Is there anything I am overlooking here? The KPC-3 is 3 weeks old
and I never got this thing to work like the MFJ (KPC firmware is
5.1). Any clues??

Thanks

Al Schlaugat / allanws@cup.portal.com \ Amateur Radio: N9ISN

944. Re: ATM on Amateur Radio?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-01 13:28:11 UTC
From: mda@cam-orl.co.uk
Message-ID: <1993Dec1.132811.22786@infodev.cam.ac.uk>
Source record: 50982

```
ATM cells are 53 bytes long.
Five bytes are used for the header
and the other 48 for data.
An organization called the ATM Forum has
been set up by interested commercial and
academic parties to define some standards.
--
Mike Addlesee
G1TFK
```

945. Storno 5114s conversion

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-01 13:28:23 UTC
From: dave@fantom.demon.co.uk
Message-ID: <754752503snz@fantom.demon.co.uk>
Source record: 50981

Hello,

I am about to convert a Storno 5114s ex PMR transceiver to 2m, and wondered if anyone has any tips/information that may be of use to me during the conversion. Also, the Storno I have has been modified for data use (it has no microphone or speaker) so any information on this would also be of great use to me. If anyone has circuit diagrams or anything similar I would gladly pay for postage/photocopying costs.

Thank you in advance,

Dave

--
David J. Phelps
dave@fantom.demon.co.uk

946. WANTED: Baycom program

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-01 14:37:31 UTC
From: jsinisalo@tnclus.tele.nokia.fi
Message-ID: <1993Dec1.143731.1@tnclus>
Source record: 50980

Hi!

What is the newest version of BAYCOM program
and where I can download it? I have only found
version 1.5 from nic.funet.fi but I think there
might be a newer!!!

****
* ###*
* #Juha Sinisalo # Internet: jsinisalo@tnclus.tele.nokia.fi #*
* #NCS/SS/SD/NTRMA # X.400 : C=FI / A=ELISA / P=NOKIA TELECOM #*
* #Phone: + 358 31 2407703 # /S=SINISALO / GI=JUHA #*
* #Fax : + 358 31 2407222 # VAX : tnclus::jsinisalo #*
* #Home : + 358 31 177125 # RA : OH3LXR #*
* ###*
****

947. (none)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-01 16:11:52 UTC
From: uucp@asarin.ORG.AR
Message-ID: <gate.H3DwDc1w165w@asarin.org.ar>
Source record: 50988

$RUH93235

Higher Speeds with the G3RUH 9600 baud Packet Radio Modem
---
by James Miller G3RUH

1993 Aug 23

The modem is capable of speeds up to 64000 baud. This limit is set by the maximum rate that the DAC chips can operate. This note describes how to achieve rates from 4800 to 64000 baud. The slowest speed is suitable for 12.5 kHz channelised radios. The highest speed suits radios that have broadcast FM bandwidth filters.

To implement a higher speed you need to:

1. Increase your TXData rate (!)
2. Increase the associated TXClock
3. Change some analogue filter components proportional to the speed increase.

It is not necessary to change either of the eproms. If you are going for a higher speed, it is likely that the radios involved are "specials" and you will already have wide bandwidth and flattish group delay, so the loopback selection 0 from the standard ROM will be OK.

The table below suggests the best conditions for different speeds. Component references are for my own PCB card. Clones are different.

Data Rate - Baud					
Comp	4800	9600	19200	38400	64000
R6	220k	100k	47k	22k	15k
R16	100k	100k	100k	47k	15k
R17	82k	82k	82k	39k	12k
R18	39k	39k	39k	18k	5k6
R19	27k	27k	27k	15k	3k9
R21	100k	100k	100k	47k	15k
R22	56k	56k	56k	27k	8k2
C18	4n7	4n7	4n7	1n	680p
C20	220p	100p	47p	22p	12p
C27	2n2	1n	470p	470p	1n)
C28	2n2	1n	470p	470p	1n)
C29	6n8	3n3	1n5	470p	470p) 2% or
C30	220p	100p	47p	47p	100p) better

C31 1n 470p 220p 220p 470p)
C32 2n2 1n 470p 220p 150p)

Deviation +/- 1.5 3 6 12 20 kHz) In FM
IF Bandwidth 8 15 30 60 100 kHz) service

These modifications have been tested in both amateur and commercial service. All comments gratefully received, and added to the database.

73 de James G3RUH @ GB7DDX.#22.GBR.EU 1993 Aug 23 [Mon] 0917 utc

948. (none)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-01 16:12:17 UTC
From: uucp@asarin.ORG.AR
Message-ID: <gate.73DwDc1w165w@asarin.org.ar>
Source record: 50893

From: LU7AKC@LU7AKC.#COL.CF.ARG.SOAM
To : NET9K6@WW

TAPR FULL-DUPLEX (NEW) 9600 BAUD MODEM MODS BY KC6HPN
APRIL 23, 1992

These modifications correct several problems that can seriously degrade the performance of the new (not the K9NG) TAPR 9600 baud modem. They have significantly improvd the usability of my modem. DCD (Data Carrier Detect) operation, in particular, went from intermittent to rock solid. All mods have been implemented on my (first production run) TAPR modem board, which is installed in a PK232MBX.

I welcome any comments and will answer any questions on these modifications. Just drop a message in my BBS mailbox,

KC6HPN @ WB6YMH.#SOCAL.CA.USA.NA.
73, Brian, KC6HPN

MODULATOR SIDE MODIFICATION:

1. HOW: Remove capacitor C5 (0.001 uf).

WHY: Op-amps tend to oscillate when driving a non-isolated capacitive load to ground. U22B, a TLC274 op-amp is driving C5 to ground through C31. U22B may oscillate at approximately 400 kHz due to the pole created by C5. This oscillation will be superimposed on the modulating waveform. To diagnose this problem, examine the eye pattern at TXA. The eye should be sharp, if it is fuzzy, the op-amp is oscillatig.

NOTE: C5 normally functions as prt of an RFI filter to prevent noise from entering the modem via the TXA line. I have found that in my situation C2 and R2 alone are sufficient. Those with RFI problems should not remove C5 Instead, place a 220 to 470 ohm resistor in series with C31 to provide resistive isolation from C5. This resistor will cause a slight loss in output drive. If necessay, you may increase output drive by changing R39 to 300 k.

NOTE: The first TAPR kits used a TL084 op-amp for U22 which may be slightly more resistant to oscillation. However, the TL084 may still oscillate.

DEMODULATOR SIDE MODIFICATION:

1. HOW: Change U4 from a TL084 to a TLC274 op-amp. Replace D2 (1N4148) with a germanium diode (Bvr > 15 volts) or if not available with a 1N3600 silicon diode.

WHY: Noise margin. The data slicer output is extremely dirty. An increase in noise margin represents improved bit recovery performance.

The TLC274 can pull its output nearly to ground, the TL084 cannot. This becomes important in U4A, where the op-amp is used as a schmitt-trigger comparator (data slicer). The op-amp output drives a digital input to ground through diode D2. D2, a 1N4148, adds 0.9 volts offset from ground, and a TL084 will add from 0.5 to 0.8 volts to this offset. Since a 74HCxx series part must see less than 1.4 volts (VCC=5.0 v) to sense a logic 0, the resulting noise margin may be as low as 1.4-(0.8+0.9)= -0.3 volts. This will cause bit recovery errors and intermitent dropout of DCD (i.e. many retries) With the TLC274 and 1N3600, noise margin is 1.4-(0.05+0.6)= 0.75 volts - much better-. Germanium diodes, now somewhat rare, add only 0.35 volts offset and will boost noise margin even further to about 1.0 volts.

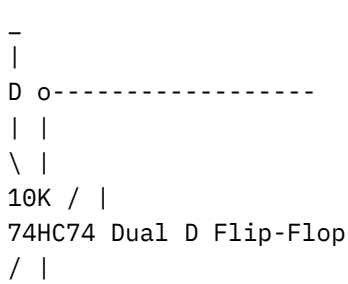
A trade off is that the TL084 slew rate is twice as fast as the TLC274, making it a faster comparator. However, increased noise margin seems to be the critical item in my modem.

2. HOW: Remove capacitor C24 (330 pf) and replace resistor R34 (2.2 k) with a wire (zero ohm) jumper -BUT ONLY IF YOU PUT IN MOD#3 -

WHY: Capacitance and series resistance are the kiss of death to digital circuits. Unless U19F is a schmitt-triggered gate, such as the 74HC14, (which it is not), its output will glitch due to the slow risetime of the input waveform. Since U19F is in the data path, this will cause an increase in bit errors, even when the modem is receiving a strong, well formed signal. Ironically, the RC circuit formed by R34 and C24 may hve been intended to filter out glitches from the bit recovery circuit (U7B, U11D) which has problems of its own (see mod#3). Or it may have been intended to solve a critical race condition by providing an RC delay (never use an RC for this...use a flip-flop instead). In the case of my modem, removing this circuit once mod#3 was made improved performance.

3. Okay, the easy part is over. This mod is the most critical and the most difficult. I'm also going to do "WHY" first this time, and "HOW" later.

WHY: It is very, very necessary to add a double-buffering circut directly after the data slicer (U4A, D2). A double buffer circuit consists of two flip-flops connected in SERIES and operated off of the same clock (fig.1). Its purpose is to synchronize external, asynchronous, signals to an internal clock without causing glitches.



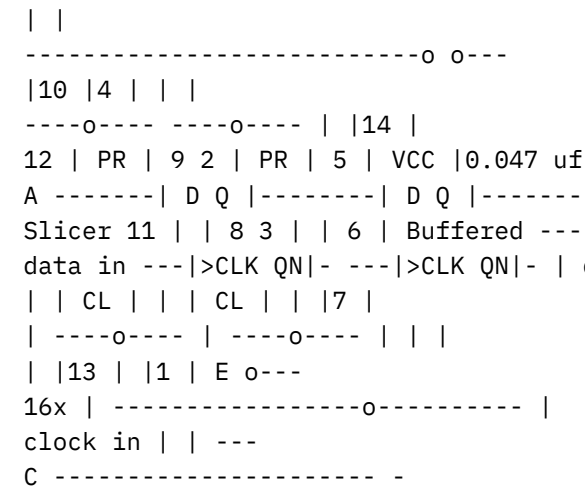

| |
--------------------------o o---
|10 |4 | | |
----o---- ----o---- | |14 |
12 | PR | 9 2 | PR | 5 | VCC |0.047 uf
A -------| D Q |--------| D Q |---------- B ---
Slicer 11 | | 8 3 | | 6 | Buffered ---
data in ---|>CLK QN|- ---|>CLK QN|- | data out GND |
| | CL | | | CL | | |7 |
| ----o---- | ----o---- | | |
| |13 | |1 | E o---
16x | -----------------o---------- |
clock in | | ---
C ---------------------- -

Figure 1: DOUBLE BUFFER CIRCUIT

If the input signal to a flip-flop is in transition when the flip-flop is clocked, the flip-flop will briefly become metastable. That is, its output will hover between logic 0 and logic 1. In a short period, the flip-flop will resolve the metastable state and settle to a 1 or a0. Two identical flip-flops connected to in PARALLEL to the same asynchronous input (as are U7B and U16) may not only produce glitches on their outputs, but will often settle to DIFFERENT logic states. Ooops! Half the modem thinks it sees the bit, half doesn't. This causes bit errors and faulty DCD.

What the double-buffer does is this: 1. On the first clock edge, the first flip-flop clocks in the asynchronous data and resolves the metastable state. 2. On the second clock, the second flip-flop clocks in the settled data and provides a stable, glitch-free output. Propagation delay and setup and hold time requirements prevent the two lip-flops from clocking the glitchy data straight through, even though they are using the same clock edge.

A deglitched, syncronous output is then passed to U16 for DCD and bit clock generation, and to U7B for bit recovery. Glitches formerly generated in U7B by metastability and passed to U19F through U11D are eliminated, removing the need for a (bad) glitch filter formed by R34 and C24.

This circuit improved both DCD reliability and data recovery considerably on my modem. If your DCD indicator (on the modem) flickers even during a strong signal and you get many retries, this circuit will help.

HOW: The general method is to construct a circuit assembly using an IC socket and mount the assembly "dead bug" style (upside-down) in the vacant U6 space. If you are using the optional internal j|nck generator and U6 is pesent, use any other convenient location. Once assembled and connected, the assembly is secured to the modem PC board by double-backed tape.

(A) Obtain a 14-pin PC mount IC socket, preferably with an integral VCC decoupling capacitor, such as those made by AUGAT. Turn the socket over. Using fine insulated wire or resistor lead stubs, etc., construct the assembly as follows:

I. Wire pins 1, 4, 10, and 13 together
II. Wire pins 3 and 11 together
III. Wire pins 2 and 9 together
IV. Solder a 10k resistor between pins 1 and 14
V. If you are not using a decoupled socket, solder a 0.047 uf capacitor between pins 14 and 7

(B) Once the assembly i completed, place it to one side and examine the modem board. Using a soldering iron and tweezers, lift the non-banded end of diode D2 clear of its mounting hole. Next, using the same procedure, lift the end of R19 nearest to U5, the 7805 voltage regulator. Bend the hanging ends of D2 and R19 together so that they touch.

(C) Using thin, flexible wire, connect point A (pin 12) on the double buffer assembly to the joined ends of D2 and R19. Secure with solder

(D) Using thin, flexible wire, connect point B (pin 5) on the double buffer assembly to the mounting hole vacated by R19. The area around the empty R19 hole is crowded, so solder carefully.

(E) Solder one end of a thin, flexible wire to U18, pin 11 on the back side of the modem board. Bring the end of the wire up and around to the top of the board, routing it alongside U18. Connect the wire to point C (pin 11) on the double buffer assembly.

(F) Next, connect a wire to point E (pin 7), ground, of the double buffer assembly. Solder the other end of the wire to the center pin of U5, the 7805 voltage regulator.

(G) Connect a wire to point D (pin 14), +5 volts, of the double buffer assembly. Solder the other end of the wire to the pin of U5 furthest from the modem PC board edge.

(H) Carefully turn the assembly upright and insert a 74HC74 dual D flip-flop IC into the socket. Make sure the notch on the IC is on the same side as the notch on the socket.

(I) Apply a thin strip of double-backed tape to the IC, invert the IC and assembly and stick it to the modem PC board in the unused U6 location.

949. (none)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-01 16:12:29 UTC
From: uucp@asarin.ORG.AR
Message-ID: <gate.i4DwDc1w165w@asarin.org.ar>
Source record: 50892

FT211 & 9600 Bps

9600 BPS with Yaesu FT-211RH

The FT-211RH has been shown to be suitable for 9600 baud packet operation. There is no major surgery required just two screened leads are required, one for TX AF the other for RX AF connected as follows:

RX AUDIO

On the RX IF Unit (sub board F2869104) connect the screened lead inner to the TK10420 IC pin 9 with the outerscreen to pin 15. Caution should be taken to solder these if soldered to the underside of the board.

TX AUDIO

On the rear of the main PCB a small potentiometer will be seen (peak deviation adjuster). Unsolder the leg nearest to the rear of the set, and connect the inner of the screened TX leads to this point, the outer to the earth plane adjacent to this point. To ensure that the 9600 baud modem is terminated in the required impedance, it is essential that a suitable terminating resistor be placed across the screened lead inner/outer, eg a 560 ohm resister; this may usefully be done at the FT-211RH potentiometer connection.

No further adjustments need to be made to the radio. On the tested modem a suitable level of 2.5 kHz deviation was achieved with one third rotation clockwise of the modem TX AF level potentiometer.

950. (none)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-01 16:12:36 UTC
From: uucp@asarin.ORG.AR
Message-ID: <gate.P4DwDc1w165w@asarin.org.ar>
Source record: 50890

From: IK2QED@IW2GKO.MI.ITA.EU
To : NET9K6@WW

In my previous bulletins i have mistake the design of the IF-UNIT
layout indicating a wrong position of the jumper to cut. This was
a cause of trouble to some OM's making this modify.
My particular thanks to F5NWK (Tanguy) wich have notice the mistake.

So I resend the correct modification with the correct layout.

73' de IK2QED, Stefano.

.....ooooo0OOOOooooo.....

FT-767GX MODIFICATION FOR 9600 BPS OPERATIONS

- Remove the bottom cover of the FT-767

- Remove the bottom cover (8 screws: 4 underneath, 2 on each side)

- Locate the IF-UNIT board. Is the biggest one of the two cards.

APPROXIMATIVE LAYOUT OF THE IF-UNIT

REAR OF 767

P86 C P7101 j21 DATA IN/OUT
_ _ ____ _ _ +------+
| | (_) |____|(_) | | | |
(D)-> |_| c242 |_| +------+

| |
R337 (_) | _ (_) R383
(A)------------> | (| -(_)L21
| Q65
_ | <-------------------- Cut here (half position).
C248 (_) | | <------+---- Scrape varnish and cut
(_)R251 | near the body of R251.
|
| _____
+----> | | <-- cut here
+---+ |
detail of | | | <-----(C)
R251 | | |
| | |
+---+ |
| |

```
------------------
| | | | | | | | |
+-+-+-+-+-+-+-+-+-+-+
| Q07 MC3359 <|
+-+-+-+-+-+-+-+-+-+-+
| | | | | | | | |

(B)---> | <----------------- scrape varnish from
() (_) ()c40 the resitance lead
c42
R39
```

- Once locate the components (jumper (A), resintances R39 (B) & R251 (C) and the connector P86 (D) connect the point (A) to the point (B) and the point (C) with the point (D).

Once you have make this simple modification you can connect yor TNC to the DATA IN/OUT jack, to the rear of the FT-767 as follows.

```
+------------+
stereo jack | |-----=---=--\
3,5 mm | |-----=---=--/
+------------+ | | |
| | +--- Data in (from tnc)
| +--- data out (to tnc)
+--- ground
```

Well that's it. You are now ready for 9600 bps operation on your FT-767GX. If you have problems, reply; I will try to answer your questions or solve your problems about this modification.

Best 73's de IK2QED - Stefano

```
+-------------------------------------------------------------------------+
| 73 de IK2QED, Stefano | IK2QED @ IW2FPO or IK2QED @ IW2GKO |
| QTH Bovisio(MI) JN45NO | |
+-------------------------------------------------------------------------+
```

951. (none)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-01 16:12:44 UTC
From: uucp@asarin.ORG.AR
Message-ID: <gate.X4DwDc1w165w@asarin.org.ar>
Source record: 50895

de DL1YDD @ DB0IZ.DEU.EU
to GERAETE @ WW

Modification of the Yaesu FT-780/FT-480 for 9600 bps use
==

The necessary modifications of the FT-780 R are quite simple. All
connections can be made without removing the main PCB.

The receiver AF *MUST* be taken directly from the discriminator. A
suitable point for this is the cathode of D02. This part is soldered
in with the ring to the top. If the transceiver is so positioned that
the tuning knob faces towards yourself, D02 is located in the lower
right of the PCB, near the ceramic discriminator, a small grey box,
abt. 5 mm x 5mm big).

The transmitter AF is to be fed to the upper left pin (refer to the
circuit diagram!) of the modulator unit. This point is also acessible
without removing the PCB. Just above of J9 there is the resistor
R 265 (labelled C 265 in my unit, 10 kOhm instead of 4.7 kOhm). You
have to remove the varnish of the upper lead of this resistor. The
TX AF is to be fed to the upper lead of this resistor.

The normal voltage level from the microphone amplifier at this point
is about 2 Vpp (just not clipping). The value should be adjusted by
VR1 of the G3RUH-FSK-modem.

Both points can be found in the circuit diagram, part "MAIN CIRCUIT".

The only question that should be left is how to get these two points
to the outside of the radio. I decided to give out the possiblity to
switch the 1750 Hz tone from the microphone (not used in US versions!).
I gained two line at the microphone plug.

For testing purposes, a 60 kB text files was transferred. There were
no retries. Reception of UO-22 and KO-23 is possible without any trouble.
Even if signals are weak (AOS/LOS), decoding works well.

vy 73 de Hartmut DL1YDD @ DB0IZ.DEU.EU

P.S.: Be careful when using this information on "Sommerkamp" radios.
They may be different (like a FT480 I saw recently).

952. (none)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-01 16:12:51 UTC
From: uucp@asarin.ORG.AR
Message-ID: <gate.54DwDc1w165w@asarin.org.ar>
Source record: 50891

Modifying the IC22A for 9600 baud operation

by Mike Curtis, wd6ehr and Dave Shalita, w6mik

This is one of the more difficult rigs to modify - most are even simpler!

This mod will make your IC22A into a dedicated 9600 baud packet radio.
Components with * are added to the crystal board.

Remove the trimmer capacitor for the transmit crystal socket you'll be using
for 9600 baud. Replace with the above circuit. The 4-20 pF trimcap should be
a good quality ceramic or other low-drift trimmer. (Sorry - Radio Shack
doesn't have anything suitable.)

Connect 2 10K resistors to C-53 (both sides) and tie the other ends together.
This junction is where you'll pick off your RXA.

Turn R-67 (dev control next to P-1 and P-2) completely counterclockwise. This
kills signals that may get into the phase modulator.

Using a service monitor, or oscilloscope connected to the detector of a
receiver, adjust the varactor bias for the best eye pattern.

Alternate bias adjustment:

Use the k9ng's 4800 Hz "idle" tone to adjust your modulator for best linearity.
Using a service monitor, or a receiver with a fairly wide passband, adjust
varactor bias for the "best" sine wave. Thanks to Brian Kantor wb6cyt for this
tip.

953. (none)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-01 16:13:07 UTC
From: uucp@asarin.ORG.AR
Message-ID: <gate.k5DwDc1w165w@asarin.org.ar>
Source record: 50894

How to iface Ic-3220 & G3RUH

Hi everybody,

The following instructions tells you how to make the right connections to an ICOM IC-3220 in order to be connected to the G3RUH 9600 bauds modem.

------------------------------ WARNING !! ----------------------------------

The following steps are not very dificult to follow, but are to be carried by a person with a minimum experience in electronic radio equipment. If you are not such a person, ask to a friend with the required knowledge to do the job for you. Otherwise, permanent damage to your rig can result.! Also, (evidently), this manipulation will invalidate the rig warranty, so perhaps you prefer to wait till the end of its validation period... The author of this note is in no way responsible for any damage that can be caused to your equipment by doing this modification to it. Do it at your own risk, and think twice before begin !

Modification instructions

(n) = Number of screws.
Material required: Screwdriver, Solder Iron, Coax cable (see text)

1 - Remove (4) the BOTTOM cover. (the one without the speaker).

2 - Remove (4+2) the shielding plate covering the P.A. output module.

3 - Remove (2) and discard the bottom small plate covering the hole behind the antenna coaxial cable. Restore the two screws in place, just to store it for the future.

4 - Locate connector J2 (The white big one, near to front panel) which is used to interface the two main boards. (16 pins).

5 - Locate pins 1, 2, and 15 of J2. Pin 1 is the nearest to the box side of the rig. Pin 15 (the one before last) is located about the middle of the main board.
Pin description:
1 - UHF TX stage modulator voltage input.
2 - Ground.
15 - UHF RX detector output.
If in doubt about pinout, see schematic diagram (Main B unit, left hand)

6 - Take two pieces of SMALL diameter coaxial cable, (Z:50 ohms preferred
by me, but ordinary AF coax cable will perform pretty well).
Aproximate diameter MUST be no more then 4 mm, and lenght as required.
Following Murphy's law be generous ...

7 - Join the two (outer) shield parts of coax cables and solder them to
pin 2 (ground) at the upper (visible) part of J2. Solder the inner
(active) part of one cable to pin 1 and the other to pin 15.
Soldering should be performed to the upper part of J2 with
EXTREME CAUTION, as the plastic support structure of J2 connector,
can be seriously damaged !!!.

8 - Route the two cables trough the main board, up to the hole near the
antenna cable, routing them in such a way, that traverses the small
square hole at the bottom part of the plate covering the final P.A.

9 - Secure the cables at the output hole with a BIG plastic strap.

10 - Reinstall (6) the cover of final P.A.

11 - Reinstall (4) the bottom cover of the rig.

12 - Solder appropiate connectors at the other end of coax cables.

End of installation.

Notes: With this modification, only the UHF part of the rig is affected, i.e.
the mod will only work for the 432 Mc/s. band. Also, some noise has been
observed at RX detector output line, which make the DCD led of the TNC blink,
but this does not affect the overall performance of the assembly. As a guide,
using the french TPK program, a serial (rs232) speed of 19200 bds, the well
known G3RUH modem, and a standard TNC, a file of 1.5 Mbytes has been
transmited in one hour, obtaining and average speed of 364 cps. (TPK
measured).

73's QRO of Andreu. EA3CQY @ EA3MM Barcelona.Catalunya.Spain

954. (none)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-01 16:13:22 UTC
From: uucp@asarin.ORG.AR
Message-ID: <gate.Z5DwDc1w165w@asarin.org.ar>
Source record: 50989

Hello All @ AMSAT

The following modification to the 220 will allow your Tnc to operate at
9600 bauds in Fullduplex. For those of you who thought you already could I
suggest you try it.
It must be mentioned at this stage that the version of my 220 is 1.3. If
yours is a different version then the story may be different, but I doubt it.

The reason for this mod is to allow my station to operate on UOSAT3 FULLDUPLEX
Previous to this mod I have been ripping my hair out as to why I could not
digipeat via UOSAT3. When one day I discovered that when I changed the
baud speed to 9600 and then put Fullduplex on the txbaud rate changed back
to 1200 whilst the rx rate remained at 9600. Most perculiar I thought.
So, I got in communications with the main Agent in the UK for Pac-comm to
see if anyone else had this same problem. No came the reply, obviously no
one else has tried it yet I thought. So here I am stuck with a TNC that is
no use to me for UO3. Can you help me then please I asked Agent. Yes we'll
see what we can do. In the meantime Rep has been to Paccomm across the pond
and I am told that they work alright over there. Cant be I said!
So anyway he suggests I try changing the thirmware which I did but still no
good. Ok we'll send them another Fax they said. Fine!
Another phone call to Agent 2 weeks later, no info or reply.
So I put pen to paper and addressed the same question to the Gentleman
concerned at Pac-comm. To date Ive no reply, letter sent some 4 months ago.

Not impressed!

With UO3 software now on release, and uploading and testing of UO3 bulletin
software imminent I figured I had better do something. The result is a
crued cure.

9600 FULLDUPLEX on the Pac-Comm TNC-220
by D. Hulatt G4WFQ 19th Aug 90

Locate 74HC4020 and remove from IC socket

CAREFULLY bend pins 1 and 12 up

Solder flying leads to pins 1 and 12 on 74HC4020

Solder flying lead to pin 12 on SIO 8530 chip

Use a SPDT switch to switch to 2 signals from 4020 to SIO

Replace 4020

Drill 1/4 inch hole in rear plate above RS232 slot

Insert switch and secure.

Thats it. Throw switch for 9600 FULLDUPLEX operation, revert for normal. NB: You still have to change buad rate in s/w.

I hope this information will be of use to some. I would like to thank Uk Agent for trying to get info from Pac-Comm. It must be like trying to get blood out of a stone.
Thanks Pac-Comm, no need to bother now I've done it myself!

73 de Dave G4WFQ @ GB7PET AUK.2404 19 Aug 90

955. PK-88 vs KPC-3 vs DPK-2

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-01 17:23:45 UTC
From: w6swe@w6swe.tapr.ORG
Message-ID: <361@w6swe.tapr.org>
Source record: 50985

djenkins@wang.com writes:

>Most of my packet operation is in TCP/IP but some is still AX-25. All of it
>is in VHF/UHF (HF privs yes, radios no). The option of operating "portable"
>is attractive for coolness and/or emergencies, but, is not essential.
>
>I am trying to decide between asking for a PK-88, KPC-3 or DPK-2. Some of the
>relative merits that I know of include:
>
>PK-88: Y Y N Y ? ? $139.95
>
>KPC-3: L 1 Y Y Y Y $119.95
>
>DPK-2: L Y N Y 2 3 $109.95
> ^ ^ ^ ^ ^ ^ ^
> | | | | | | |
> | | | | | | +------- HRO Price
> | | | | | |
> | | | | | +--------- Open squelch operation
> | | | | +------------ TNC-2 Compatible
> | | | +--------------- PBBS
> | | +------------------ WEFAX
> | +---------------------- Kiss Mode
> +------------------------ 12 Operation (L = Low power consumption)
>
>1) The guy at HRO said it does KISS Mode but it didn't say in the catalog. 2)
>"100% firmware compatability with TAPR TNC-2"
> "* TNC-2 Compatible * Runs all TNC-2proms"
>3) $31.95 optional board

All three of them run KISS. The DPK-2 is the only one which has
firmware which is completely compatible with TAPR firmware. Any
of these can be upgraded to 'open squelch' operation using a
$15.00 kit from TAPR. The PK-88 and DPK-2 both can be adapted to
use external modems, but the KPC-3 cannot.

You might also consider the PacComm Tiny-2 or the MFJ-1270B. They
have similar features. The 1270Bs now contain the DCD mods for
open squelch, according to their ads. These are both TAPR
firmware compatible and can accept external modems. The 1270B has
300 baud HF capability built-in, while the similar 1274 also has a
tuning indicator which is essential for HF.

Bob Nielsen, W6SWE Internet: w6swe@tapr.org

Tucson, AZ AX.25: w6swe@wb7tls.az.usa.na
Amateur IP: 44.124.12.16

956. Help - Packet address?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-01 19:55:46 UTC
From: duffy@pogo.den.mmc.com
Message-ID: <duffy-011293125546@duffy.den.mmc.com>
Source record: 50984

Hello. I'm not a Ham, and have never been on this group before, but
I was directed here after asking a question in another forum...

I don't really know anything about the ham world, or packet radio, but
I've been given the "packet radio address" of an acquaintance abroad.
It looks a lot to me like a normal email address, but sending email doesn't

seem to quite work. After talking to a few people, I've been told that it
is possible to send mail to this address, but I have to go through some
hoops
to do it. Does anybody know what those hoops might be? The address I was
given is 2E0AFP@GB7MAD.#24.GBR.EU.

Thanks for any help or pointers!

--

... Rick
duffy@pogo.den.mmc.com
rduffy@nyx.cs.du.edu

957. Re: PK-88 vs KPC-3 vs DPK-2 - Comments?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-01 20:29:37 UTC
From: lawrence@combdyn.com
Message-ID: <1993Dec1.202937.19385@combdyn.com>
Source record: 50900
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.digital.misc

```
In article <CH9IHD.HBG@wang.com> djenkins@wang.com (Dave Jenkins) writes:
>I am trying to decide between asking for a PK-88, KPC-3 or DPK-2. Some of
>the relative merits that I know of include:
>
>KPC-3: L 1 Y Y Y Y $119.95
> ^ ^ ^ ^ ^ ^ ^
> | | | | | | |
> | | | | | | +------- HRO Price
> | | | | | |
> | | | | | +--------- Open squelch operation
> | | | | +------------ TNC-2 Compatible
> | | | +--------------- PBBS
> | | +------------------ WEFAX
> | +---------------------- Kiss Mode
> +------------------------ 12 Operation (L = Low power consumption)
>
>1) The guy at HRO said it does KISS Mode but it didn't say in the catalog.
>2) "100% firmware compatability with TAPR TNC-2"
> "* TNC-2 Compatible * Runs all TNC-2proms"
>3) $31.95 optional board
>
```

I own a KPC3, I went with the advice to get the cheapest TNC I could find...
and at the time it was.

The Open Squelch operation is Software Carrier Detect.....which isn't
recommended if to use it in low power consumption mode....since the processor
is constantly polling the audio to check for a valid signal.

The option board for the DPK-2 is probably hardware that does carrier detect,
which would probably draw less power.

The KPC-3 is maybe command set compatible, but it is not firmware compatible to
TNC-2. Its proprietary stuff from Kantronics.

Yes, the KPC3 has KISS, I run my in that mode all the time now that I'm
addicted to NOS. I'll probably continue to run it this way when I start
running a BBS (I plan to run a BPQ switch so I can still run NOS with the BBS).


```
--
--EMAIL----------------------------PHONE-----------FAX------------
| WORK: lawrence@combdyn.com | (403)529-2162 | (403)529-2516 | CallSign
| HOME: dreamer@lhaven.uumh.ab.ca | (403)526-6019 | (403)529-5102 | VE6LKC
-------------------------------------------------------------------
disclamer = (working_for && !representing) + (Combustion Dynamics Ltd.);
```

958. Re: PK-88 vs KPC-3 vs DPK-2

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-01 21:35:11 UTC
From: rdewan@casbah.acns.nwu.edu
Message-ID: <2dj2mf$c7s@news.acns.nwu.edu>
Source record: 50986

On a comparison of Pk88, DPK-2 and KPC-3, Bob Nielsen <w6swe@w6swe.tapr.ORG>
wrote:
>
>All three of them run KISS. The DPK-2 is the only one which has
>firmware which is completely compatible with TAPR firmware. Any
>of these can be upgraded to 'open squelch' operation using a
>$15.00 kit from TAPR. The PK-88 and DPK-2 both can be adapted to
>use external modems, but the KPC-3 cannot.
>...

The KPC-3 comes ready to run "open squelch" right out of the box. All
it needs are two commands:

interface terminal
cd software

Rajiv
aa9ch
r-dewan@nwu.edu

959. Need Manual or Pin-out for Wilson 1402 HT Speaker/Mic conn.

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-01 22:18:08 UTC
From: dreeves@ese.ogi.edu
Message-ID: <62286@ogicse.ogi.edu>
Source record: 50987
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment

I have an OLD Wilson 1402 HT - XL controled, looks like a brick -
and want to use it for packet. Can anyone point we towards a
manual or provide information on the pin-outs of what appears
to be the Speaker-Mic connector? It has 6 pins and is a locking
ring type (as found on modern mobile units, but smaller) but I
have no clue as to which pin is what.
Also, if anyone knows of sources for odd-sized connectors like
this, please e-mail.

TNX and 73, de N6XHW

D. Reeves

--
|B. Douglas Reeves Dept. Env. Sci.& Eng. Oregon Graduate Institute|
|N6XHW on 146.900 in PDX dreeves@ese.ogi.edu everywhere else|
|"... life itself represents a nonequilibrium condition." - J. F. Pankow |

960. Re: MICOR on 9.6kbaud packet?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-02 01:14:54 UTC
From: fmitch@netcom.com
Message-ID: <fmitchCHDvGw.9IH@netcom.com>
Source record: 50896

Andy Peterson (peterson@ux1.cso.uiuc.edu) wrote:
: I'm trying to get a 9600 baud packet station on the air, and want to know if
: I can modify/use a Motorola MICOR UHF (460 band) radio on 9.6k packet. Is
: there anyone out there who has had a good/bad experience in trying to do so?
: I have a Micor service manual on the way, but would like some 'real-world'
: input. Thanks in advance and 73
: Andy N9NTI

hi andy... mitch, wa4osr here in mobile, alabama...

the micor 9600 baud expert is Dave DeBlanc, wb5vmr, 615 avenue f,
marrero, la 70072... i don't think he is on the internet... i don't
have his telephone number handy... you can reach him through the
internet by sending a message to angelo glorioso, iii, n5uxt...
angelo's address is angelo_glorioso_III@agwbbs.new-orleans.LA.US
dave and angelo helped put on the 9600 baud workshop at the arrl
national convention in huntsville, al back in august... i have a
mitrex that dave converted as a backup rig for the dx cluster
backbone... he has converted many micors and mitrexes ... see
if u can catch up with him...

mitch, wa4osr
fmitch@netcom.com

--
---
fmitch@netcom.com
Felton "Mitch" Mitchell, WA4OSR in Mobile, Alabama USA
205-342-7259 home, 205-476-4100 work, 205-476-0465 FAX
co-sysop for W4IAX bbs running fbb ... sysop for WA4OSR DXCluster in Mobile..
---

961. COMPLETE Documented NOS Wanted

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-02 04:04:33 UTC
From: mattharvey@aol.COM
Message-ID: <9312012304.tn22729@aol.com>
Source record: 50897

I would like to know how I could attain a copy of the latest version of KA9Q unmodified NOS. I would appreciate it if I could find a package with complete documentation that includes the file BM.EXE. Please send responses to MattHarvey@aol.com OR KD4AZH@KB4GBS.#TPA.FL.US.NOAM.

Thank you.

962. FT 2700 RH and 9600 baud

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-02 10:40:54 UTC
From: romad@pluto.sm.dsi.unimi.it
Message-ID: <2dkgnm$q4s@pluto.sm.dsi.unimi.it>
Source record: 50901

Who knows how to modify a Yaesu FT 2700 RH to work with 9600 baud modems ?
Thanks in advance.

Domenico IW2JKO.

--

##
Domenico Romano - <romad@ghost.sm.dsi.unimi.it>
Department of Computer Science - University of Milan - Italy
##

963. Looking for NOS Executable with NNTP

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-02 14:35:49 UTC
From: ron@alpha.nsula.edu
Message-ID: <ron.6.00099922@alpha.nsula.edu>
Source record: 50902

I am looking for a compiled version of NOS that has the NNTP server compiled in. I do not currently have a compiler so I can't put together my own. Along these lines...Does anyone know of the GNU c++ compiler will successfuly compile NOS.

Thanks in advance for any pointers to an executable.

Ron - KA5LUG

RON@ALPHA.NSULA.EDU

964. cancel

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-02 17:43:37 UTC
From: nld@uipmzb.PHysik.uni-mainz.DE
Message-ID: <9312021743.AA03971@uipmzb.physik.uni-mainz.de>
Source record: 50903

[No readable article body recovered]

965. Re: wb7tpy gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-02 19:24:02 UTC
From: brian@nothing.ucsd.edu
Message-ID: <2dlfciINNfh@network.ucsd.edu>
Source record: 50904

In article <2ctpip$h25@wvhpadm1.mentorg.com> Hank_Oredson@mentorg.com writes:
>If people would simply STOP trying to connect the two networks,
>the problem would just go away.

All networks get connected eventually - people want it that way.

No, the root of the problem is the hams who went and decided that they knew how to build a mail addressing scheme without consulting any of the people who had already been doing networking for nearly a decade, and who keep denying that there is something wrong.

If you and the other BBS people would simply admit your mistake and work towards a gradual integration of mail addressing, the problem could be solved forever.

If the BITNET, CSNET, and uucp networks each can change over to a new style of addressing - a total number of sites that is orders of magnitude more than all the ham BBSs in the world - then hams can too.

There are over TWO MILLION hosts on the Internet. Total mail sites are estimated by some at nearly 5 million hosts reachable by internet-style mail addresses. Doesn't it make sense to go with what is clearly working so very well?

By comparison, the ham network is a tiny number of sites. There are less than half a dozen BBS programs in common use. Changeover would not be that difficult.

The first step along the road to recovery is to end denial.
- Brian

966. Re: wb7tpy gateway

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-02 20:37:55 UTC
From: brian@nothing.ucsd.edu
Message-ID: <2dljn4INN1hf@network.ucsd.edu>
Source record: 50905

In article <2ctpu1$h25@wvhpadm1.mentorg.com> Hank_Oredson@mentorg.com writes:
>|> wb6cyt@wb6cyt.#soca.ca.usa.na.ampr.org
>And in fact is what the FQDN actually is in the bbs network, we just don't
>usually add the top domain because it is only required at the gates ...

No, it's not. There are no such hosts registered, there are no
wildcards for those subdomains, and the mail gateways I'm familiar
with don't do that.

Hank, if you don't know what you're talking about, please don't
make things up as you go.
- Brian

967. exotic digital modes

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-02 20:39:06 UTC
From: sscalsk@screamer.nswc.navy.mil
Message-ID: <SSCALSK.93Dec2153906@screamer.nswc.navy.mil>
Source record: 50906

Can anyone provide a few know frequencies, that can be received on the East Coast (MD), for some of the more exotic digital modes like: ARQ-E, ARQ-E3, ARQ-S, FEC-A/S, Piccolo, TWINPLEX, SWED-ARQ or VFT (sometime called FDM). I'd like to hear what they really sound like and try to tune a few. It seems that some of these modes can be pretty difficult to find.

-= stan

968. Who should use gateways for what (was Re: wb7tpy gateway)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-02 21:45:13 UTC
From: colla@burzaco.satlink.net
Message-ID: <gate.36NyDc1w165w@burzaco.satlink.net>
Source record: 50909

winter@apple.com (Patty Winter) writes:

>In article <1993Nov23.085806.17098@mnemosyne.cs.du.edu>,
>Jonathan Magee <jmagee@nyx10.cs.du.edu> wrote:
>>The only use of the internet in ham radio should be to connect ham
>>stations via worm holes ie only hams can use it.
>

Over long haul paths Internet could be considered one heck of a backbone provided you can check both the origin and the destination are hams; some countries might consider one side not being an amateur illegal, some others not.

Beside that, as far as I know there is no regulations preventing amateurs to send mail (unidirectionally) to the Internet world with a contents within regulations.

I can also think in several things from the internet that could also be carried legally over packet nets such as software, special bulletins, emergency mail, etc; most of them usually served by automatic machines and again with contents that could be considered otherwise legal if exchanged between two licenced hams over the air.

To got an Internet hook, even an UUCP downstream feed not always is neither cheap nor feasible.

Ing.Pedro E. Colla - Mail:colla@burzaco.satlink.net - Buenos Aires - Argentina

969. Re: HAM-server index file

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-03 01:35:52 UTC
From: gilbaronw0mn@delphi.com
Message-ID: <9312022028591.gilbaronw0mn.DLITE@delphi.com>
Source record: 50907
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc

>>Phooey on you Gil! I for one am glad to see the list of files. This
>>ham-server is a gold mine of info - I've gotten so many goodies off

That is what the index is for. Go and read the index yourself and then get what you need. Don't subject the rest of the network to this. It is not needed and waste time and space and LOTS of money.

Gil Baron, El Baron Rojo, W0MN Rochester,MN
"Bailar es Vivir"
PGP2.X key at key servers or upon request

970. Re: PK-88 vs KPC-3 vs DPK-2

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-03 01:43:01 UTC
From: dan@aznet.stat.com
Message-ID: <eaLyDc1w165w@aznet.stat.com>
Source record: 50917

rdewan@casbah.acns.nwu.edu (Rajiv Dewan) writes:

> On a comparison of Pk88, DPK-2 and KPC-3, Bob Nielsen <w6swe@w6swe.tapr.ORG>
> wrote:
> >
> >All three of them run KISS. The DPK-2 is the only one which has
> >firmware which is completely compatible with TAPR firmware. Any
> >of these can be upgraded to 'open squelch' operation using a
> >$15.00 kit from TAPR. The PK-88 and DPK-2 both can be adapted to
> >use external modems, but the KPC-3 cannot.
> >...
>
> The KPC-3 comes ready to run "open squelch" right out of the box. All
> it needs are two commands:
>
> interface terminal
> cd software

THE ONLY PROBLEM IS THAT IT IS SOFTWARE OPEN SQUELCH AND FALSES A GREAT DEAL!

>
> Rajiv
> aa9ch
> r-dewan@nwu.edu

Dan

---

dan@aznet.stat.com
Daniel J. Meredith
Fax - (602) 956-2566
Voice - (602) 809-0555

971. Packet with Motorola GM-300

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-03 05:21:46 UTC
From: Rich.Wacaser@launchpad.unc.edu
Message-ID: <2dmida$835@samba.oit.unc.edu>
Source record: 50908

Howdy all,

My brother and I are going to get started in packet
and he was wondering if he has to use a TNC at all
with his GM-300. Apparently the unit has a connection
on the back he can connect directly to the computer.
He wants to know if there is some software that will
allow him to *do* packet without a TNC. If so, where
can it be found (FTP would be nice)?

Thanks in advance for the help. 73 de KF9QQ.

Rich Wacaser

--
The opinions expressed are not necessarily those of the University of
North Carolina at Chapel Hill, the Campus Office for Information
Technology, or the Experimental Bulletin Board Service.
internet: laUNChpad.unc.edu or 152.2.22.80

972. Re: Looking for NOS Executable with NNTP

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-03 15:10:22 UTC
From: peter@globv1.hacktic.nl
Message-ID: <1993Dec3.151022.8805@globv1.hacktic.nl>
Source record: 50924

ron@alpha.nsula.edu (Ron Wright) writes:

>I am looking for a compiled version of NOS that has the NNTP server compiled
>in. I do not currently have a compiler so I can't put together my own. Along
>these lines...

WNOS has nntp support built in. It's on ucsd.edu:/hamradio/packet/tcpip/wnos.

>Does anyone know of the GNU c++ compiler will successfuly
>compile NOS.

You mean DJGPP, the GCC compiler for MS-DOS? If so, then the answer is no.

Groetjes,
Peter Busser
--
Linux, the choice of a GNU generation.

973. TEKK Radios

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-03 15:43:34 UTC
From: kb4lfh@vnet.ibm.com
Message-ID: <CHGuCM.qMK@sernews.raleigh.ibm.com>
Source record: 50910

Can anyone tell me about the TEKK 440 based Radios? I know they
are only 2watts, but are they good performers? Any information
will be greatly appreciated.

73, Mike KB4LFH

==========
KB4LFH @ VNET.IBM.COM
==========

974. Re: KPC-3: Remote Station Gets 'Busy' Replies??

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-03 17:26:43 UTC
From: MIKEN@YaleVM.YCC.Yale.Edu
Message-ID: <16C99AF0B.MIKEN@YaleVM.YCC.Yale.Edu>
Source record: 50911

What software are you using with the TNC?
Miken@yalevm.cis.yale.edu
N1JJX@N1JJX.AMPR.ORG
In article <97124@cup.portal.com>

AllanWS@cup.portal.com (Allan BA Schlaugat) writes:

>This problem is making me lose more hair than I have on my head!
>
>I have a KPC-3 TNC which I use to connect to the local PacketCluster.
>The cluster sysop set up a script where if the path between the cluster
>and my location drops and I retry out, the cluster will attempt to reconnect
>to my TNC. This is how I discovered the 'problem'...
>With the computer off (a 386 clone), leaving the TNC/radio on, a station
>cannot connect to my TNC. They receive a ***busy on their end and I get
>a *** connect request! Note that the remote station is not trying to
>access the KA-Node or the mailbox; he is just trying to connect to my
>normal user ID. When I turn the computer on and boot up my packet software,
>I get a buffer full of *** connect requests as well as other channel
>traffic. Stations can now connect to me. It seems that I must keep the
>computer on with terminal software loaded up but this does not seem right.
>I have been involved with packet for 3 years and have used the MFJ-1278
>with no problems. In fact, I cannot reproduce this problem with the
>MFJ. Some locals suggested CTS/RTS hardware flow control might
>be at fault here. I have my USERS set at 10 /MAXUSERS at 10 btw.
>Is there anything I am overlooking here? The KPC-3 is 3 weeks old
>and I never got this thing to work like the MFJ (KPC firmware is
>5.1). Any clues??
>
>Thanks
>
>Al Schlaugat / allanws@cup.portal.com \ Amateur Radio: N9ISN

975. HamComm interface works -- thanks

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-03 20:33:46 UTC
From: henke@scaly.ssc.gov
Message-ID: <HENKE.93Dec3143346@scaly.ssc.gov>
Source record: 50936

On Thursday, 2 December, David Moisan posted an article containing schematics for W.F. Schroeder's "HamComm 2.0 Receive Circuit." This device, along with an appropriate radio, PC-AT computer and software such as HamComm or PKTMON, allows reception of a number of digital modes including FAX, RTTY and packet.

I built the device from the posted plans last night, and was quite pleased with it. It cost less than five bucks (granted, I scavenged from my parts drawer a bit) and worked right the first time around. It took well under an hour to complete. I heartily endorse the HamComm interface for anyone who knows which end of a soldering pencil to grab. It is certainly a hack, but nonetheless a clever and effective one.

(I'm not associated with the original poster, the interface designer or any of the authors of the software mentioned, other than as a satisfied user.)

Thanks for a fun piece of hardware. 73.

976. Simple PBBS software?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-03 21:35:13 UTC
From: RABALAIS@symantec.com
Message-ID: <RABALAIS.4.0@symantec.com>
Source record: 50913

Is there a *simple* to set up and maintain PBBS program out there?

Nothing fancy, just your basic messages/bulletins, no forwarding at all...
Thanks,
Gerard N0PRQ
rabalais@symantec.com
N0PRQ @ KD5SL.#BTR.LA.USA.NA

977. Re: KPC3 'busy'

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-03 23:07:05 UTC
From: russ@sbase2.ATt.COM
Message-ID: <9312031807.aa23334@sbase2.wariat.org>
Source record: 50912

Try turning the command MONITOR OFF before turning off the computer.
Works for me in a non-high level packet usage. I've been told the
buffer in the TNC fills up otherwise and can't send it to the puter
so sends the busy signal on connect requests.
de W8SQY

978. Re: ATM on Amateur Radio?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-03 23:38:10 UTC
From: karn@unix.ka9q.ampr.org
Message-ID: <2doil2$50g@qualcomm.com>
Source record: 50926

In article <199311281802.KAA20528@ucsd.edu>, OSYSMAS@MVS.OAC.UCLA.EDU (Michael Stein) writes:
|> After reading Gigabit Networking by Craig Partridge, which
|> includes ATM as one of the topics in high speed networking, I'm
|> not convinced that ATM is even a good idea for fiber links.

Bingo. I was involved with early ATM back at Bellcore, and one of the reasons I left was disgust with what ATM had become. ATM had even polluted SMDS, the telcos' last chance at providing a decent metropolitan area connectionless packet data service. The telcos had proven again that they were mostly clueless about data above the physical transmission level.

|> ATM breaks packets up into cells, the idea being that an time
|> critical (voice or video) packet can't affort to be held back
|> because a long (4k bytes?) packet is being sent. So all packets
|> are broken into cells, which can then be sent as needed (critical
|> ones first).
|>
|> Well, it appears that this solves the problem. Only on a 1Gbit
|> link a 4K byte packets is only 32 microseconds long so the
|> problem doesn't really exist for this speed link!

Absolutely! But you must understand the real driving factor behind the design of ATM: voice. For all their lip service of "integrated" voice/data/video services and supporting the Information Age, voice is still the telcos' bread and butter, and it's the only thing they consider important. For example, the specific frame size chosen for ATM (48 bytes of data + 5 bytes of header) was picked to minimize the packetizing delay for conventional 64kb/s digital voice, so as to avoid having to use echo cancellers to take care of reflections off of the hybrids in the analog local loops at the ends of a voice call. (The degree to which people object to an echo of a given amplitude is a strong function of its delay -- the longer the delay, the more annoying it is). To be sure, this choice was more the fault of the Europeans than the Americans, who wanted a somewhat larger cell size.

Nevertheless, complaints from computer networking people that tiny, fixed-sized cells were not what they needed didn't seem to faze the telcos.

|> Also my understanding is that currently all you can get today on
|> ATM is a permanent virtual circuit, no "dial up". It appears
|> that switched service is years away. And it's not clear how
|> (if?) ATM will handle multicast traffic.

A very common misconception about ATM, perhaps encouraged by the telcos themselves to sound more trendy, is that ATM is packet switching. It really isn't. First of all, ATM cells look nothing like, say, the Ethernet frames with which computer networking people are familiar: full source and destination addresses, followed by a variable length data field with a reasonably large size limit. And there's too little buffering in an ATM switch to make it a true packet network, where lots of little bursty users all contend for each link through a queue.

So to achieve a reasonably low lost-cell rate in ATM, you have to set up a circuit in advance and preallocate some fraction of link bandwidth. If it isn't used, it goes to waste. Think of ATM as just another TDM (time division multiplex) switch, albeit with somewhat finer-grained control over the bandwidth allocations that can be made. Other than that, ATM doesn't do much that can't already be done by a much simpler cross-connect switch at far lower cost.

|> Remember, ATM is brought to you by the same people who designed
|> ISDN as the answer to local telephone service. Will it follow
|> the same installation / availability / cost path?

Most likely, or even worse. ISDN's and ATM's "features" are worse than useless to anyone trying to build a real packet switched network like the Internet. Oh sure, you *can* use them, and people do when the tariffs are right. But all that added complexity buys you nothing over a bunch of leased lines. Hence they're worse than useless.

In the case of ISDN, I don't know anyone who uses it as anything but a leased line substitute between local packet routers. And this happens only when the telcos price ISDN far enough below their traditionally overpriced leased line services to make it worth dealing with ISDN's many added hassles. Of course, if the telcos were to price all their services according to their true costs, ISDN would immediately disappear and they'd have to admit their mistake.

Raw digital transmission, at least along major fiber routes, is the one thing the telcos know how to do well. Unfortunately, getting just that service out of them at a reasonable price is very difficult. Raw transmission isn't "glamorous" enough for the telcos, so they keep trying to "do it all" (e.g., move into information services). Unfortunately, they don't even know how to properly *switch* data, much less provide the complete stack including the applications.

|> What does this have to do with Amateur Radio? Well, I've been
|> thinking about all the claims that there isn't enough spectrum to
|> do Gigabit networking via RF. Really? What about local and line
|> of sight links in the 24Ghz to 100Ghz range? Sounds hard (a
|> challange) today, but doesn't sounds like it will remain so...

Well, IF we were to use ATM, then those claims about insufficient spectrum would be true. If we don't, there shouldn't be a problem. :-)

Phil

979. Re: TEKK Radios

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-04 01:11:00 UTC
From: fmitch@netcom.com
Message-ID: <fmitchCHHKMD.Bz2@netcom.com>
Source record: 50914

kb4lfh@vnet.ibm.com wrote:
: Can anyone tell me about the TEKK 440 based Radios? I know they
: are only 2watts, but are they good performers? Any information
: will be greatly appreciated.

: 73, Mike KB4LFH

: ===================================
: KB4LFH @ VNET.IBM.COM
: ===================================

hi mike... the tekk's work great! we are using one with a 20 watt brick
for our main 9600 baud backbone node on 446.100... for the price,
you can't go wrong... we have ordered 5 more to complete our
backbone... we probably will use tthe power amps out of some
old commercial gear for a little higher power...

the tekk expert is geoff, kd4goe, he is on the 'net and his
'net address is geoffp@netcom.com

cul...
mitch, wa4osr

--
----
fmitch@netcom.com
Felton "Mitch" Mitchell, WA4OSR in Mobile, Alabama USA
205-342-7259 home, 205-476-4100 work, 205-476-0465 FAX
co-sysop for W4IAX bbs running fbb ... sysop for WA4OSR DXCluster in Mobile..
----

980. TNC Software for Amiga

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-04 06:16:35 UTC
From: jmonaco@dorsai.dorsai.org
Message-ID: <2dpa03$6hq@dorsai.dorsai.org>
Source record: 50915

Can anyone recommend a good piece of TNC terminal software for the Amiga, especially one available via anonymous FTP? A nice extra would be built-in MFJ-1278T command support -- nice, but not necessary as long as the software is well written and supports scripts, macros, etc.

Thanks in advance for any assistance.

--
John Monaco

<jmonaco@dorsai.dorsai.org> | <monaco@io.org> | <smonaco@nyx.cs.du.edu>

981. Re: TEKK Radios

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-04 13:40:38 UTC
From: fmitch@netcom.com
Message-ID: <fmitchCHIJBr.Kty@netcom.com>
Source record: 50916

Felton Mitchell (fmitch@netcom.com) wrote:
: kb4lfh@vnet.ibm.com wrote:
: : Can anyone tell me about the TEKK 440 based Radios? I know they
: : are only 2watts, but are they good performers? Any information
: : will be greatly appreciated.

: : 73, Mike KB4LFH

: : ===================================
: : KB4LFH @ VNET.IBM.COM
: : ===================================

: hi mike... the tekk's work great! we are using one with a 20 watt brick
: for our main 9600 baud backbone node on 446.100... for the price,
: you can't go wrong... we have ordered 5 more to complete our
: backbone... we probably will use tthe power amps out of some
: old commercial gear for a little higher power...

: the tekk expert is geoff, kd4goe, he is on the 'net and his
: 'net address is geoffp@netcom.com

: cul...
: mitch, wa4osr

oops... forgot to tell you one thing... the tekk's don't like
12 volts... you have to power them from 10-11 volts max, else
they aren't frequency stable... they pull such little current
this is not a problem, just a nusiance...

mitch, wa4osr

--
---
fmitch@netcom.com
Felton "Mitch" Mitchell, WA4OSR in Mobile, Alabama USA
205-342-7259 home, 205-476-4100 work, 205-476-0465 FAX
co-sysop for W4IAX bbs running fbb ... sysop for WA4OSR DXCluster in Mobile..
---

982. Misroutes to Namibia usa.na domain (was: wb7tpy gateway)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-04 19:40:53 UTC
From: david@djwhome.demon.co.uk
Message-ID: <755059253snx@djwhome.demon.co.uk>
Source record: 50918

Well it looks from the DNS lookup that what is catching people out is a very shallow domain name structure in Namibia. My guess is that there is little or no real Internet connectivity in Namibia so there is one mail relay which forwards all mail by something like UUCP. Thus a *.na MX record is not unreasonable, as nearly all na mail needs to go to the same relay and there is no point in recording individual sub-domains; a lot of commercial domains do this. I'm not sure about the na MX records, but there is nothing technically wrong with them.

Although the mentorg.com example of dropping the domain name for local traffic is largely true, it misses one significant point, which is that you should not use top level domain names as subdomain names when doing this.

Actually, in this particular case, there would seem to be a simple solution within the domain name system which could avoid this problem. All that needs to happen is for Namibia to add an MX record for *.usa.na, pointing to a North American Internet to Packet gateway, or a bit bucket (but the IP address must be good so that mailers don't try to fall back to the *.na address). With the former, as I understand it, inbound mail needs human vetting, so a warning can be sent to the originator and the mail optionally forwarded into the Packet network. Alternatively, the gateway could just bounce it with an appropriate message.

By doing this, at most, only a DNS query has to go to Namibia, and if a long time to live is given for the entry any one source of such misrouted mail should only rarely need to do this.

By the way, the logic behind the UK restriction on third party traffic partly relates to the historic state monopoly on telecommunications and partly to the idea that the radio spectrum is commercially valuable, so amateurs, who get access well below the market rate for the resource should not be able to compete with commercial communication providers. (I think that the US will only allow third party traffic when both the countries involved allow it.)

I am copying this to the DNS administrator and postmaster for na, but to fully implement it will need some cooperation from a US gateway. So I suggest that you agree as to which gateways should be targets of a *.usa.na MX record and then the administrators of those gateways should follow up to the na DNS administrator.

--
David Woolley, London, England david@djwhome.demon.co.uk

983. Digital with Sound Blaster???

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-04 20:29:23 UTC
From: kb2ear@kb2ear.ampr.org
Message-ID: <2dqrv3$9ot@kb2ear.ampr.org>
Source record: 50933
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.digital.misc

Can someone please tell me if there is any software that uses a Sound
Blaster to receive CW,RTTY,SSTV,PACKET,etc,etc.

Thanks, 73,
--
Scott R. Weis KB2EAR
Internet: kb2ear@kb2ear.ampr.org
Snail Mail: 10 Palmer Rd., Kendall Park, NJ, 08824-1228
Phone: +1 908 297 0469

984. HAM-server index file

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-05 06:31:29 UTC
From: HAMSinfo@GRAFex.sbay.org
Message-ID: <gate.755073089@GRAFex.sbay.org>
Source record: 50919
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc

```
Executed: Sun Dec 05 01:31:18 1993

NOTES: ----------------------------------------------------------------------

Mac Catch 22: .HQX files need to be de-binhexed. All others must be
uudecoded. Order UUTOOL.HQX for uudecode tool.

If you do not know how to use HAM-server, send email to
HAM-server@GRAFex.sbay.org. In the text, place HELP.

If you order a file and do not get it, check the index to be sure you have
spelled the filename correctly. If you have ordered the file correctly,
then order a new INDEX, as I may have moved the file to a different
directory. The system is still expanding, and I am trying to keep it in
managable chunks.

Also, if you have ordered files from HAM-server and do not receive them, it
might be because your return path is incorrect. My bounce mailbox fills up
quite regularly with bounce messages. And, since the path is incorrect, I
cannot contact you to let you know.

Orders must be sent to HAM-server. Orders sent to KA6ETB or HAMSinfo are
ignored. If you are reading this from usenet, do not respond to this post.
You must send email to HAM-server@GRAFex.sbay.org.

A new INDEX is automatically generated weekly and when files are moved or
added.

The archives may contain the same file under different names. If you should
run across one of these, please let me know with email to
KA6ETB@GRAFex.sbay.org

-------------------------------------------------------------------------------

Directory: /hamradio/

00-INDEX.TXT 10155 11-21-93

Directory: /hamradio/10meters/

10MBEACO.LST 6233 3-26-93

Directory: /hamradio/advanced/

ADV21.ZIP 103501 6-18-93
ADVANCED.FRQ 1275 8-15-91

Directory: /hamradio/antennas/
```

```
ANTENNAS.BAS 2227 3-26-93
ANTENNAS.TXT 7771 2-02-93
BUTERNUT.TXT 6106 3-26-93
CRPT2NTA.TXT 10713 2-02-93
DISCONE.TXT 1805 3-26-93
LOADPOLE.ZIP 7542 3-01-93
MININEC3.ZOO 164929 3-01-93
MOBILE.TXT 4458 3-26-93
PORTABLE.ANT 1735 5-26-93
YAGIMAX.ZIP 352305 3-01-93

Directory: /hamradio/arrl/

ARRLBBS.TXT 3153 3-03-93
ARRLDIGI.TXT 23303 2-02-93
ARRLINDX.TXT 17591 3-02-93
ARRLINFO.TXT 3321 2-02-93
ARRLJOB.TXT 18455 2-02-93
ARRLLOGO.PS 2911 2-02-93
ARRLPIO.TXT 116131 2-02-93
QSLBURO1.TXT 14440 2-02-93
QSLBURO2.TXT 10117 2-02-93

Directory: /hamradio/bandplan/

BANDPLAN.DOC 2528 3-24-92
PLAN129.TXT 1928 8-12-91
PLAN222.TXT 585 12-22-91
PLAN2M.TXT 522 8-12-91
PLAN440.TXT 572 8-12-91
PLAN6M.TXT 249 8-12-91
PLAN900.TXT 1108 8-12-91

Directory: /hamradio/callbook/

CALBK-WP.TXT 4064 8-17-92
CALLBOOK.C 18991 3-26-93
CLBK-ARY.TXT 1592 12-28-90
CLBK-EYH.TXT 1480 3-07-93
CLBK-INT.TXT 2280 3-06-93
CLBK-IYA.TXT 556 11-23-91

Directory: /hamradio/contests/

CONTEST.ARC 25065 3-01-93
CONTEST.ZIP 147989 3-01-93
CT626.ZIP 178372 3-01-93
UNIGRID2.BAS 12341 3-26-93
WHATSON.ARC 15826 3-01-93
WLOGDEMO.ZIP 163276 3-01-93
WRTLOG60.ZIP 836615 6-08-93

Directory: /hamradio/dx/
```

AUTOLOG4.ARC 165621 3-01-93
DXB20DMO.ZIP 129658 3-01-93
DXCC.ARC 10079 11-11-93
DXCC.LIS 15783 11-11-93
DXCC104.ARC 120117 3-01-93
DXCCK2DI.TXT 15904 2-02-93
DXCCTXT.Z 7080 11-11-93
DXLOCATE.LST 35911 3-26-93
DXLOG185.ZIP 171738 3-01-93
HAM_LOG.ZIP 94848 3-19-93
HFPROP.BAS 12300 3-26-93
LOGBOOK.ARC 104668 3-01-93
LOGBOOK.ZIP 83422 3-19-93
SLOVENIA.FRQ 4150 10-03-93

Directory: /hamradio/exams/

AUTOEXAM.ZIP 251630 3-01-93
EXAMCRDT.TXT 6490 2-02-93
EXAM_OPS.TXT 7431 2-02-93
HAMQUIZ.ZIP 101015 3-19-93
HAMSTACK.TXT 3439 2-02-93
HANDICAP.TXT 9632 2-02-93
VEFC24.ARC 26774 3-01-93

Directory: /hamradio/extra/

EXT21.ZIP 99672 6-18-93
EXTRA.FRQ 1157 8-25-91

Directory: /hamradio/general/

GEN012.ZOO 24160 6-18-93
GEN21.EXE 83879 3-19-93
GEN21.ZIP 72931 6-18-93
GENTEST.EXE 136865 1-11-92

Directory: /hamradio/help/

BCUMAHAM.TXT 5156 3-28-93
BITFTP.HLP 11347 5-09-93
ELMER100.ZIP 65425 3-01-93
ELMERS.DIR 46722 3-07-93
ELMRINFO.TXT 6984 2-02-93
ELMRLIST.TXT 46722 3-07-93
FAQ.TXT 9164 11-28-93

Directory: /hamradio/hf/

COMB6.ZIP 43190 3-01-93
GC103.ARC 23776 3-01-93
MICROMUF.BAS 4881 3-01-93
MICROMUF.PAS 7695 3-01-93
SOL_GEO.DAT 24836 2-02-93

SOL_TERA.TXT 27028 2-02-93

Directory: /hamradio/internet/

FTPSITES.TXT 3480 6-06-93
GATEWAYS.TXT 5785 2-02-93
HAMEMAIL.TXT 223537 2-02-93
MAILGATE.TXT 22734 11-18-93
NEWSGRPS.TXT 6917 2-02-93
RECINFO.TXT 9252 3-14-93
USNETSEL.TXT 8164 2-02-93

Directory: /hamradio/macstuff/exams/

ADVANCED.SIT 133986 4-11-93
EXTRA.SIT 128944 4-11-93
GENERAL.SIT 97148 4-11-93
NOVICE.SIT 121453 4-11-93
TECH.SIT 107031 4-11-93
TSTADVAN.HQX 536625 11-11-93
TSTEXTRA.HQX 476347 11-11-93
TSTGEN.HQX 320149 11-11-93
TSTNOV.HQX 409007 11-11-93
TSTTECH.HQX 341519 11-11-93

Directory: /hamradio/macstuff/misc/

FRQVALET.HQX 114671 11-21-93
MACSOFT.TXT 28948 11-21-93

Directory: /hamradio/macstuff/morse/

CODE1_0.HQX 44302 11-11-93
CODETUTR.HQX 23957 11-11-93
MAC525_1.HQX 89968 8-17-93
MAC535.HQX 122083 8-17-93
MANIA.HQX 48803 11-11-93
MASTER.HQX 58146 11-11-93
MORSE.MAC 263 3-02-91
MORSE.HQX 16369 11-11-93
MORSE1_1.HQX 16568 11-11-93
TRAINER.HQX 121407 11-11-93

Directory: /hamradio/macstuff/packet/

SAVANTDM.HQX 178005 8-17-93
SAVNTUPD.HQX 80757 8-17-93

Directory: /hamradio/macstuff/tcpip/

SOFTKISS.HQX 145274 8-17-93

Directory: /hamradio/macstuff/tcpip/mac-nos/

CONFIG.HQX 424 9-27-93
IM10B27N.HQX 483 9-27-93
NET2325.CPT 198493 9-27-93
NET2325.HQX 325 9-27-93
NET2326.CPT 198431 9-27-93
NET2326.HQX 330 9-27-93
NOSINTRO.MSW 69121 4-23-92
TCP_IP.SIT 172688 9-27-93

Directory: /hamradio/macstuff/utility/

CPTXPAND.HQX 18256 11-21-93
DEARJ.SIT 14776 11-18-93
MACGZIP.CPT 140672 11-18-93
STUFLITE.BIN 465987 11-18-93
UUTOOL.HQX 76605 11-18-93

Directory: /hamradio/misc/

9PN-25PN.TXT 676 3-27-93
AUTOLOG.ZIP 109886 3-19-93
BATTRIES.TXT 9694 2-02-93
BBS_LIST.TXT 41800 2-28-93
BEACONS.INF 2284 7-29-92
CA-PHONE.BBS 1338 11-06-92
CHART.C 1999 3-26-93
CHURCVR.TAR 491520 8-04-93
CONDOR.INF 2870 9-26-92
CONDORMP.TXT 3486 7-16-89
EASYLOGR.ZIP 228482 3-19-93
ELMER.INF 9129 11-21-93
ELMER.LST 53132 11-21-93
FCC-PRB1.TXT 25754 4-05-93
FIELDDAY.EXE 239510 11-11-93
FLNTALAW.TXT 3528 2-02-93
HAMPLTES.TXT 5507 2-02-93
HAM_READ.ARC 1366 3-19-93
K1EA-619.EXE 315212 3-19-93
K2UYH.ARC 108510 3-19-93
LOGOS.PS 9258 2-02-93
MAILORDR.TXT 20383 2-02-93
MAP.ZIP 802214 3-19-93
MARS.FRQ 987 8-28-93
NICADS.INF 6533 3-26-93
PRO-2004.MOD 4418 3-26-93
PRO-2004.REV 18797 3-26-93
QSLCARD1.PS 27337 3-26-93
QSLCARD2.PS 6399 3-26-93
RFI.TXT 1991 3-17-93
RFI001.TXT 2158 6-08-89
RFI002.TXT 1815 6-08-89
RFI003.TXT 3288 6-08-89

RFI_TIPS.TXT 5948 2-02-93
SCANNER.MOD 5287 3-26-93
SMITHCHA.PS 23664 3-26-93
UC-U2AT.REV 7239 3-26-93
VHFPROP.BAS 24498 3-26-93

Directory: /hamradio/mods/

2ETO2AT.MOD 1443 8-07-93
56KBFIX.MOD 1093 5-26-93
741AMODS.ZIP 8974 5-26-93
760XLT.MOD 490 5-26-93
ALLBAND.MOD 2870 5-26-93
ALR22T.MOD 2152 5-26-93
BC205XLT.MOD 4221 5-26-93
DJ-580 155310 5-26-93
DJ500.MOD 2885 5-26-93
DR510.MOD 4186 5-26-93
FRQSGALR.ZIP 206290 5-26-93
FT-530.MOD 2302 8-07-93
FT101E.MOD 2639 5-26-93
FT209RH.MOD 1034 5-26-93
FT212RH.MOD 1345 5-26-93
FT23R.MOD 776 5-26-93
FT411.MOD 4824 5-26-93
FT411-2.MOD 1026 5-26-93
FT470-2.MOD 9942 5-26-93
FT470-3.MOD 1951 5-26-93
FT4700.MOD 1195 5-26-93
FT727CAT.MOD 2520 5-26-93
FT727R.MOD 1071 5-26-93
FT747GX.MOD 1221 5-26-93
FT767GX.MOD 1452 5-26-93
HT-24-T.MOD 3581 7-24-93
IC-24.MOD 2071 5-26-93
IC-MU2.MOD 1186 5-26-93
IC02.MOD 2082 5-26-93
IC02-2.MOD 1231 5-26-93
IC02-3.MOD 861 5-26-93
IC04.MOD 1897 5-26-93
IC24-2.MOD 993 5-26-93
IC24-3.MOD 5387 5-26-93
IC2410.MOD 4437 5-26-93
IC28.MOD 479 5-26-93
IC2SAT.MOD 4994 5-26-93
IC2SAT-2.MOD 8131 5-26-93
IC32.MOD 2501 5-26-93
IC32-2.MOD 2719 5-26-93
IC3200A.MOD 452 5-26-93
IC37.MOD 3900 5-26-93
IC735IBM.MOD 1407 5-26-93

IC900.MOD 2945 5-26-93
ICOM32AT.MOD 1937 5-26-93
ICOM735.1 3614 5-26-93
ICOM735.2 1380 5-26-93
ICOM735- 3614 5-26-93
ICW2A.MOD 13392 5-26-93
KAMDCD.MOD 2048 5-26-93
KENWD930.MOD 6640 5-26-93
NOAASTNS.ZIP 20995 5-26-93
PK232LOK.MOD 1858 5-26-93
PORTABLE.ANT 1735 5-26-93
PRO2004.MOD 5157 5-26-93
PRO2005.MOD 2602 5-26-93
PRO2006.MOD 3119 5-26-93
PRO2020.MOD 4775 5-26-93
PRO34.MOD 1239 5-26-93
R7000.MOD 3404 5-26-93
R7000-2.MOD 26880 5-26-93
RADIO.MOD 4915 5-26-93
RDIOMODS.SRV 956 5-26-93
TC2DUPLX.MOD 1581 5-26-93
TH-215A.MOD 2174 3-26-93
TH215 2072 5-26-93
TH215.MOD 2227 5-26-93
TH225.MOD 2932 5-26-93
TH25.MOD 7811 5-26-93
TH27A 6725 5-26-93
TH28A 2608 5-26-93
TH75.MOD 1385 5-26-93
TINY2TNC.MOD 1431 5-26-93
TM-721A.MOD 4867 3-26-93
TM-741-M 17526 5-26-93
TM2570A.MOD 778 5-26-93
TM321A.MOD 600 5-26-93
TM321A-2.MOD 957 5-26-93
TM321A-3.MOD 1415 5-26-93
TM421A.MOD 1836 5-26-93
TM701.MOD 2979 5-26-93
TM701A.MOD 280 5-26-93
TM721.MOD 4228 5-26-93
TM721-2.MOD 2784 5-26-93
TM721-3.MOD 6073 5-26-93
TM721A 13389 5-26-93
TM731.MOD 1612 5-26-93
TM741.MOD 1230 5-26-93
TM941A-2.MOD 2723 5-26-93
TNC2.MOD 1589 5-26-93
TNC2A.MOD 3329 5-26-93
TS-930S.MOD 2226 3-26-93
TS140.MOD 563 5-26-93

TS430.MOD 825 5-26-93
TS430-2.MOD 844 5-26-93
TS430MOD.DOC 2719 3-26-93
TS430S.REV 5066 3-26-93
TS440.MOD 1589 5-26-93
TS440-AT.MOD 971 5-26-93
TS440S.INT 9986 3-26-93
TS680.MOD 514 5-26-93
TS680-2.MOD 2940 5-26-93
TS711.MOD 123 5-26-93
TS790A.MOD 5059 5-26-93
TS850-1.MOD 12088 5-26-93
TS850-2.MOD 9086 5-26-93
TS930.MOD 6931 5-26-93
TS940IBM.MOD 2539 5-26-93
U2AT.MOD 3161 5-26-93
UNI2510.MOD 1622 5-26-93
W21AT.MOD 4330 10-10-93

Directory: /hamradio/morse/

AUTOCW.ARC 60849 3-01-93
CODETEST.HIN 7287 3-26-93
CW.ARC 62536 3-01-93
CW104.ZIP 83367 3-01-93
CWDEMO.ZIP 573318 11-11-93
FFTMORSE.ZIP 27344 3-01-93
HAMCOM21.ZIP 182531 3-01-93
MACHINE.ARC 13061 3-01-93
MOR21.ZIP 53013 6-18-93
MORSE.BAS 5661 3-01-93
MORSE30B.ZIP 71113 3-01-93
MORSETST.BAS 7179 3-01-93
PROCW.ZIP 24227 3-01-93
ROBOCOPY.ZIP 27346 3-01-93
SM316.ZIP 109484 3-01-93
SUPERIOR.SHR 99149 11-25-93

Directory: /hamradio/mswin/

DSP2D_UP.ZIP 26368 11-11-93
GMAIL.TXT 110 11-11-93
GMAIL.ZIP 78712 11-11-93
ICMPCMD.ZIP 3294 11-11-93
MSWINNOS.ZIP 4014 11-11-93
NETSORT.ZIP 1505 11-11-93
QVTNET23.ZIP 212649 11-11-93
RTSORT.ZIP 8192 11-11-93

Directory: /hamradio/newfiles/

AMPR.ORG 409718 7-06-93
FRQSGALR.ZIP 206290 5-26-93
NETAMSRC.ARC 56320 9-29-93
NETMAC52.SIT 178633 9-29-93
NETMAC55.SIT 179770 9-29-93
NET_AMIG.ARC 108322 9-29-93
NET_BM.ARC 37772 9-29-93
NET_DES.ARC 26249 9-29-93
NET_DOC.ARC 143194 9-29-93
NET_EW.ARC 115955 9-29-93
NET_MAC.HQX 223461 9-29-93
NET_READ.ME 2443 9-29-93
NOAASTNS.ZIP 20995 5-26-93
NOS_KIT.DOC 4313 11-05-93
NOS_KIT.ZIP 659372 11-05-93
NTEX_MS.ARC 118873 3-19-93
PCECAP.ZIP 100174 3-19-93
TEC20.ZIP 88796 3-19-93
TEC21.EXE 95783 3-19-93
TRAVINFO.LST 38204 3-26-93
TUNEUP.TNC 2557 7-03-91
UC-U2AT.REV 7239 3-26-93
WIRETAP.TXT 32215 3-26-93

Directory: /hamradio/newsltrs/

MLH01.TXT 3986 6-03-93
MLH02.TXT 3631 6-03-93
MLH03.TXT 3933 6-03-93
MLH04.TXT 4815 6-03-93
MLH05.TXT 6136 6-03-93
MLH06.TXT 7803 7-06-93
MLH07.TXT 3665 6-03-93
MLH08.TXT 5446 6-03-93
MLH09.TXT 4449 6-03-93
MLH10.TXT 3827 6-03-93
MLH11.TXT 4224 5-31-93
MLH12.TXT 3072 5-31-93
MLH13.TXT 6512 5-31-93
MLH14.TXT 5248 5-30-93
MLH15.TXT 6231 7-07-93
MLH16.TXT 6272 10-06-93
MLH1.TXT 3986 6-03-93
MLH17.TXT 6016 11-25-93

Directory: /hamradio/novice/

NOV21.EXE 106365 3-19-93
NOVICE25.ARC 50049 3-01-93
NOV_TEST.ZIP 95588 3-01-93

Directory: /hamradio/nts/

3RDPARTY.LST 1802 9-09-91
CANADA.ADR 375 2-14-90
COUNTRY.ADR 2975 11-25-91
NTS12.ZIP 93145 6-18-93
NTSDISK.EXE 37401 11-20-91
RGRAM27.ZIP 48027 3-19-93
ZIPKEY.ZIP 198368 11-11-93

Directory: /hamradio/os2/

OS2NOSV4.ZIP 262476 11-11-93
OS2PMAIL.ZIP 36178 11-11-93
OS2SPEED.ZIP 2050 11-11-93
PMNOS1DS.ZIP 843122 11-11-93
PMNOS1DX.ZIP 377128 11-11-93

Directory: /hamradio/packet/

9600BAUD.PKT 8154 3-06-91
A802MANP.TXT 35627 8-10-93
AMTORFRQ.TXT 9158 10-13-93
ARYGATE.TXT 10286 4-11-93
AUTOBPQ.ZIP 92993 9-04-93
AX25SPEC.TXT 66235 3-30-93
BBSTIP01.TXT 1435 1-04-91
BBSTIP02.TXT 1868 1-04-91
BBSTIP03.TXT 1869 1-04-91
BBSTIP04.TXT 2032 1-04-91
BBSTIP05.TXT 2196 1-04-91
BBSTIP06.TXT 1132 1-04-91
BBSTIP07.TXT 1180 1-04-91
BBSTIP08.TXT 863 1-04-91
BBSTIP09.TXT 2260 1-04-91
BBSTIP10.TXT 1325 1-04-91
BBSTIP11.TXT 1755 1-04-91
BBSTIP12.TXT 2222 1-04-91
BBSTIP13.TXT 2305 1-04-91
CATEGORY.LST 3477 1-26-92
CHEAPPKT.TXT 4258 3-30-93
FAQ.TXT 33570 3-08-93
FAQ_PAKT.TXT 29942 2-02-93
HFBBS.TXT 19833 10-13-93
HFHINTS.TXT 3020 4-05-90
HI-SPEED.NET 15864 8-07-93
HIERADR.DOC 4849 6-15-90
INFOPAKT.TXT 39574 2-02-93
KAM401.ARC 156061 3-01-93
NEXTGEN.BBS 3948 3-21-93
PKTINFO1.TXT 2891 2-20-93
PKTINFO2.TXT 6338 2-02-93
ROUTING.TXT 28069 3-26-93
RTTY12G.ARC 126651 3-01-93

SETTINGS.TNC 1089 7-03-91
TTY37.ARC 36600 3-01-93
WP.DOC 1507 5-09-93
XPCOM131.ZIP 403741 5-29-93

Directory: /hamradio/packet/loz/

00-INDEX.TXT 2446 4-19-93
PACKET01.LOZ 3746 3-03-93
PACKET02.LOZ 9436 3-04-93
PACKET03.LOZ 6675 3-07-93
PACKET04.LOZ 7372 3-10-93
PACKET05.LOZ 6155 3-17-93
PACKET06.LOZ 15037 3-23-93
PACKET07.LOZ 5707 5-11-92
PACKET08.LOZ 6715 5-12-92
PACKET09.LOZ 4578 5-12-92
PACKET10.LOZ 8698 1-31-93
PACKET11.LOZ 6493 1-31-93
PACKET12.LOZ 5881 5-13-92
PACKET13.LOZ 6285 5-29-92
PACKET14.LOZ 7157 5-13-92
PACKET15.LOZ 4714 5-14-92
PACKET16.LOZ 3396 5-14-92
PACKET17.LOZ 4683 5-14-92
PACKET18.LOZ 2168 5-14-92
PACKET19.LOZ 4902 5-15-92
PACKET20.LOZ 7564 5-15-92
PKTINF01.TXT 4109 7-22-91
PKTINF02.TXT 6580 7-28-91
PKTINF03.TXT 4555 8-06-91
PKTINF04.TXT 3806 8-12-91
PKTINF05.TXT 4484 8-21-91
PKTINF06.TXT 4192 9-03-91
PKTINF07.TXT 4885 9-09-91
PKTINF08.TXT 4676 9-17-91
PKTINF09.TXT 3938 10-01-91
PKTINF10.TXT 2786 10-28-91
PKTINF11.TXT 3412 11-12-91
PKTINF12.TXT 7717 11-26-91
PKTINF13.TXT 2480 12-17-91
PKTINF14.TXT 2499 1-06-92
PKTINF15.TXT 2975 1-06-92
PKTINF16.TXT 1646 1-14-92

Directory: /hamradio/packet/software/

APL700.EXE 412928 8-26-93
FE.ZIP 16626 7-14-93
GP.DOC 125349 7-24-93
GP-1X50.ZIP 370518 7-06-93

LLINK220.ZIP 375144 11-21-93
PAX285.ZIP 15395 7-14-93
PCT214.ZIP 378739 3-01-93
PKGOL624.ZIP 323067 3-26-93
PKTSFTWR.TXT 4185 2-02-93
RTTY12G.ARC 126651 3-01-93
SELCAL11.ZIP 12590 3-01-93
TTY37.ARC 36600 3-01-93
XPCOM131.ZIP 403741 5-17-93

Directory: /hamradio/packet/software/aa4re/

AA4REBBS.INF 2654 4-11-93
AA4REBBS.ZIP 357277 3-19-93
B21TANSI.ZIP 3620 5-26-93
BB21HC.ZIP 259837 5-26-93
BB21HL.ZIP 110380 5-26-93
BB21HN.ZIP 358648 5-26-93
BB21HP.ZIP 239199 5-26-93
DOC211.ZIP 99644 5-26-93
HH21H.INF 1377 5-26-93
MBB35SRC.ZIP 72475 5-26-93
MBBIOS35.ZIP 29299 5-26-93
MBBIOS38.ZIP 39704 5-26-93
WATCHDOG.ZIP 8425 5-26-93

Directory: /hamradio/packet/software/dsp/

DOC.ZIP 301000 9-02-93
DSP105.ZIP 46817 9-02-93
DSP4SCHE.ZIP 238499 9-02-93
DSPTIPUP.ZIP 21417 9-02-93
SOURCE.ZIP 671625 9-02-93

Directory: /hamradio/packet/software/g8bpq/

BPQ405E.ZIP 143360 5-26-93
BPQ406.ZIP 170880 5-26-93
BPQ406A.ZIP 20216 5-26-93
BPQ406E.ZIP 181926 5-26-93
RSWD0330.ZIP 66213 5-26-93
RZSW30.ZIP 97411 5-26-93
TFPCX.ZIP 34817 5-26-93

Directory: /hamradio/packet/software/thebox/

BOOTARC.EXE 243874 7-19-93
INSTALL.BAT 174 7-19-93
NOS_1229.EXE 203295 7-06-93
NOS_1229.LP 172009 7-06-93
NOS_1229.MAN 221639 7-06-93
NOS_1229.MAP 75531 7-06-93
NOS_1229.NR 168281 7-06-93

NOS_1229.VER 52 7-06-93
SOURCARC.EXE 131999 7-19-93
SYSARC.EXE 105377 7-19-93
SYSOP15.ENG 65121 7-19-93
UPDATE.BAT 1354 7-19-93

Directory: /hamradio/packet/software/thenet/

THENET.FLA 6498 7-19-93
THENET.INF 4005 7-19-93
THENET.PAR 3692 7-19-93
TNET-X1G.TXT 68 7-19-93
TNET-X1G.ZIP 119680 7-19-93
TNET-X1H.ZIP 123904 7-19-93
TNET-X1J.EXE 218857 11-11-93
TNET-X1J.TXT 280 11-21-93
TNET-X1J.ZIP 335650 11-11-93
X1JDEV.EXE 116275 11-11-93

Directory: /hamradio/packet/software/f6fbb/

FBB515.ZIP 991152 7-30-93
TPK181.ZIP 579533 7-30-93

Directory: /hamradio/packet/software/wa7mbl/

OIZ-UTIL.ARC 64062 7-30-93
REQDIR.ARC 34438 7-30-93

Directory: /hamradio/packet/software/wa8ded/

TNCDED.DOC 29130 7-30-93
TNCDED.HEX 45068 7-30-93
TNCDED.MSG 4116 7-30-93
WA8DED 1004 7-30-93
WA8DED.DOC 14790 7-30-93
WA8DED.ROM 19284 7-30-93

Directory: /hamradio/packet/tcpip/

00-INDEX.TXT 1602 6-08-93
AMPR.ORG 409718 7-06-93
AMPRHOST 303457 7-06-93
AMPRINFO.TXT 5603 2-02-93
AMPRXORG.REV 516969 7-06-93
ASMOBJ.MSG 607 6-08-93
ASMOBJ.ZIP 6766 6-08-93
BMEXE332.ZIP 30898 6-08-93
BMSRC_ST.ARC 25334 8-07-93
CONNEX.Z 12030 7-06-93
E920603.ZIP 189423 6-08-93
EXPIRY.ZIP 53196 6-08-93
HELP_V02.ZIP 11984 7-06-93

INTRONOS.ZIP 54272 7-06-93
MAN-9106.ZIP 57169 6-08-93
NAN24HYC.ZIP 42635 6-08-93
PCNET.EXE 227498 4-26-92
PKTDRVR.INF 157 6-08-93
S920603.ZIP 656302 6-08-93
SATTRACK.ZIP 34886 7-06-93
SLFP123.ZIP 30476 6-08-93
TCPIP.INF 5818 6-02-93
VIEW9206.ZIP 384591 6-08-93

Directory: /hamradio/packet/tcpip/bm/

BM.DOC 16641 9-02-93
BM332C.TXT 235 9-02-93
BM332C.ZIP 52889 9-02-93
BMEXE.ARC 38547 9-02-93
BMH02.TXT 790 9-02-93
BMH02EXE.ZIP 300305 9-02-93
BMH02SRC.ZIP 60096 9-02-93
BMUTIL.ZIP 11546 9-02-93
VIEW0207.ZIP 320436 9-02-93

Directory: /hamradio/packet/tcpip/docs/

BEGIN.DOC 110255 2-07-91
FAQ-1292 75121 7-06-93
INTRONOS.ZIP 54272 7-06-93
KA9QBGN.ZIP 190366 6-08-93
KA9QNOS.NR 141577 7-06-93
KA9QNOS.PS 133704 7-06-93
NETNIX.PS 286542 7-06-93
NOSBGNLP.ZIP 57488 7-06-93
NOSBGNPS.ZIP 137021 7-06-93
RSPF22P.TXT 85164 7-06-93
TAPR92.TXT 72334 7-06-93
TAPR9600.MOD 11209 7-06-93
TDMA.TXT 12713 7-06-93
USERMAN.ZIP 112344 7-06-93

Directory: /hamradio/packet/tcpip/g1emm/

G1EMMKIT.EXE 168079 7-06-93
G1EMMKIT.ZIP 213973 7-06-93
KH113016.EXE 193643 7-06-93
KH113016.ZIP 593938 7-06-93
PCELM21.ZIP 116682 7-06-93
READ.ME 1077 7-06-93
SMALLEMM.EXE 134945 7-06-93

Directory: /hamradio/packet/tcpip/gpsnos/

GPSC1DOC.ZIP 38361 7-30-93
GPSC1EXE.ZIP 162104 7-30-93
GPSC1HLP.ZIP 13415 7-30-93
GPSC1SRC.ZIP 638737 7-30-93

Directory: /hamradio/packet/tcpip/gracilus/

GCALLBK.TXT 440 7-06-93
GCALLBK.ZIP 13914 7-06-93
GRAC20M2.ZIP 539910 7-06-93
P10DVR.TXT 824 7-06-93
P10DVR.ZIP 25230 7-06-93
P10R30E.TXT 29184 7-06-93
P10R30E.ZIP 291851 7-06-93
TWINDV21.ZIP 38656 7-06-93

Directory: /hamradio/packet/tcpip/nos/

KIT_SRC.TXT 4191 11-05-93
KIT_SRC.ZIP 39567 11-05-93
NOS-SLFP.ZIP 310211 6-08-93
NOSVIEW.ZIP 1764 7-06-93
NOSVW304.ZIP 682322 7-06-93
ROSE-NOS.ZIP 18050 7-06-93

Directory: /hamradio/packet/tcpip/nos-kit/

KIT_SRC.TXT 4191 10-27-93
KIT_SRC.ZIP 39567 10-27-93
NOS_KIT.DOC 4313 10-27-93
NOS_KIT.ZIP 659372 10-27-93

Directory: /hamradio/packet/tcpip/pa0gri/

GR-BUGS.BEE 5120 7-06-93
GR-NOTES.BEE 19584 7-06-93
GRIBEE08.ZIP 831616 7-06-93
GRNOS08.ZIP 268800 7-06-93
GRNOS08S.ZIP 257408 7-06-93
NOS_1229.DOC 172009 7-06-93
NOS_1229.EXE 203295 7-06-93
NOS_1229.MAN 221639 7-06-93
NOS_1229.MAP 75531 7-06-93
NOS_1229.ROF 168281 7-06-93
NOS_1229.VER 52 7-06-93
NOS_1229.ZIP 821866 7-06-93
RSPF0826.TXT 294 7-06-93
RSPF0826.ZIP 53695 7-06-93

Directory: /hamradio/packet/tcpip/pe1chl/

920420.DIR 6353 7-06-93
920420LT.ARC 175565 7-06-93
920420MT.ARC 111710 7-06-93

920420TC.ARC 153934 7-06-93
920420TP.ARC 104054 7-06-93
920420TS.ARC 113244 7-06-93
AUTOEXEC.DRS 2321 7-06-93
HISTORY.ARC 48620 7-06-93
NETDOC1.ARC 16485 7-06-93
NETDOC2.ARC 44672 7-06-93
PACSAT.ARC 87474 7-06-93
PB920430.ZIP 131138 7-06-93
PE1CHL.NET 417 7-06-93
README.CHL 384 7-06-93
SCCPRIN5.ARC 159020 7-06-93

Directory: /hamradio/packet/tcpip/wg7j/

JNOS107B.EXE 283045 7-06-93
JNOS107B.ZIP 987123 7-06-93
WG7JDOC.ZIP 46266 7-06-93

Directory: /hamradio/rigs/

COMPICOM.TXT 15707 3-26-93
FRGLOD10.ZIP 14451 4-01-93
HF_RIGS.TXT 4317 2-02-93
HT_INFO.TXT 10990 2-02-93
IC-12AT.REV 6682 3-26-93
IC-32AT.MOD 2715 3-26-93
IC02A.MOD 2424 3-26-93
IC02ATR.MOD 3294 3-26-93
IC28H.REV 6855 3-26-93
ICOM.C 9232 3-14-93
ICOM-110.C 9842 3-26-93
ICOMCI-V.CMD 7443 3-26-93
INFOEQPT.TXT 10063 2-02-93
KENWD930.MOD 6640 3-26-93
MNUFCTRS.TXT 5051 2-02-93
QST_REVW.TXT 41097 2-02-93
R7000.HIN 26430 3-26-93

Directory: /hamradio/satelite/

DOVE3W13.ZIP 43150 3-01-93
ELETRANS.C 2176 3-26-93
GEOSAT20.ZIP 56405 3-01-93
HAM_SAT.TXT 10967 2-02-93
ORBIT23.ARC 36852 3-01-93
PROTOCOL.1 39022 6-19-89
PROTOCOL.2 2157 6-19-89
QUICKS24.ZIP 77120 3-01-93
SATELITE.BAS 5642 3-01-93
SATELITE.HOW 18571 3-26-93
SATTAIM.ARC 1860 3-01-93

SATTRACK.INF 5017 3-26-93
SATTRACK.ZIP 34886 11-11-93
TRAK280.ZIP 346847 3-01-93
USAT92B2.ZIP 86782 3-01-93
WU120EXE.ZIP 222368 3-01-93

Directory: /hamradio/satelite/arsene/

ARSENE.TXT 1968 7-19-93
TELEM14G.ZIP 29363 7-19-93
TELEM14H.ZIP 29447 7-19-93
TELEMENG.ZIP 39938 7-19-93
TELEMFRA.ZIP 40680 7-19-93

Directory: /hamradio/sstvfax/

AUTOFAX.ARC 12452 3-01-93
FFT.COM 52096 2-02-93
FFTH.COM 53760 2-02-93
JVFAX50.ZIP 407934 3-01-93
SSTVFAX2.ZIP 28323 3-01-93
SSTVWFAX.TXT 37309 2-02-93
WEFAX.ARC 35968 3-01-93
WXRDR22.ARC 98944 3-01-93

Directory: /hamradio/swl/

FAQ_SWL.TXT 21936 2-02-93
SWL114.ZIP 302908 3-01-93
SWL_INFO.TXT 20666 2-02-93

Directory: /hamradio/technici/

TEC22.ZIP 74516 6-18-93
TECHTEST.EXE 148542 1-11-92

Directory: /hamradio/utility/

ARJ230NG.EXE 200704 6-18-93
ARJ241A.EXE 223856 8-07-93
BOOZ.ZIP 12639 6-18-93
COMP16.ZIP 16102 6-18-93
COMP430D.ZIP 20241 6-18-93
FILTER11.ARC 55936 3-01-93
INTMOD60.ARC 11902 3-01-93
JLEM.ZIP 14846 2-02-93
OHMSLAW.ARC 22197 3-01-93
PDZIP.ZIP 63473 6-18-93
PKUNZIP.EXE 23528 3-15-90
PKUNZIP2.EXE 28806 5-17-93
QEXTRACT.ZIP 43123 6-18-93
RC85PR15.ZIP 50983 3-01-93
RFTOOLS.ARC 144799 3-01-93

```
UNARJ230.ZIP 39074 6-18-93
UNZIP.EXE 26838 6-18-93
UNZIP41.ARC 121470 6-18-93
UNZIP41.EXE 21933 6-18-93
UUDECODE.BAS 5709 3-28-93
UUDECODE.C 5565 3-28-93
UUDECODE.DOC 519 3-28-93
UUDECODE.DBG 4658 11-21-93
UUEXE521.ZIP 32455 8-24-93
WHERITIS.ARC 30943 3-01-93
ZIP.EXE 59260 6-18-93
ZIP10EX.ZIP 158335 6-18-93
ZOO210.EXE 55721 6-18-93

Directory: /hamradio/vlf/

1750MTR.TXT 6532 2-02-93
```

985. Question --> VITASAT

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-05 12:22:45 UTC
From: suhaylt@bwc.org
Message-ID: <2dsjql$h9@bwc.bwc.org>
Source record: 50923
Cross-posted to: rec.radio.amateur.digital.misc,rec.video.satellite

Anyone out there has any information about VITASAT? is it up ? any ftp or telenet address? thanks in advance for your help.

Suhayl
suhaylt@bwc.org

986. Question --> VITASAT

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-05 12:39:10 UTC
From: suhaylt@bwc.org
Message-ID: <2dskpe$jr@bwc.bwc.org>
Source record: 50922

Anyone out there has any information about VITASAT? is it up ? any ftp or telenet address? thanks in advance for your help.

Suhayl
suhaylt@bwc.org

987. Re: HAM-server index file

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-05 17:35:57 UTC
From: ka6etb@GRAFex.sbay.org
Message-ID: <NHfAtAuCBh107h@GRAFex.sbay.org>
Source record: 50932
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc

In <9312022028591.gilbaronw0mn.DLITE@delphi.com> gilbaronw0mn@delphi.com (Gilbert Baron) writes:
>>>Phooey on you Gil! I for one am glad to see the list of files. This
>>>ham-server is a gold mine of info - I've gotten so many goodies off

>That is what the index is for. Go and read the index yourself and then get
>what you need. Don't subject the rest of the network to this. It is not
>needed and waste time and space and LOTS of money.

Probably no more costly than the AMSAT or KEPLER info published on a much more regular basis.

Boy, are you gonna be peeved when I get HAM-server set up for PBBS.

73 de KA6ETB

988. unsubscribe

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-05 18:01:05 UTC
From: nld@uipmzb.PHysik.uni-mainz.DE
Message-ID: <9312051801.AA06403@uipmzb.physik.uni-mainz.de>
Source record: 50920

[No readable article body recovered]

989. Recent APRS posts from the .ampr net

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-05 18:33:15 UTC
From: rander@netcom.com
Message-ID: <randerCHKrJF.J0L@netcom.com>
Source record: 50921

This post is a relay of some recent traffic on the packet network
about the APRS. For those who aren't familiar, APRS is the
"Automatic Packet Reporting System" by WB4APR that allows position
data from a GPS or LORAN receiver to automatically be sent out by
a TNC and then displayed on a map display be other stations running
APRS.

--------------------included messages follow--------------------------

Date: 04 Dec 93 15:26
Message-ID: <28974@KA6EYH>
From: W7KKE@KA6EYH
To: APRS@ALLCAN
Subject: New/Modified APRS maps
Path: KI6EH!N6IYA!N6QMY!WA8DRZ!WD6CMU!KA6EYH!KA6EYH

From: W7KKE@KA6EYH.#NOCAL.CA.USA.NA
To : APRS@ALLCAN

I have uploaded some new and updated APRS maps to the KA6EYH LLBBS. This
BBS can be reached at 415-359-6985. Login with your callsign and use the
password "COAST".

The maps are in the APRS directory. This BBS uses standard packet BBS
commands, plus semi-DOS commands. It supports Xmodem and Ymodem in the
land-line mode.

To download a file using Xmodem use the following commands after log-in:

D - Sets you in FBBDOS mode
cd APRS - Changes current directory to APRS
dir - Lists contents of the directory
XGET filename - Sets up file transfer via Xmodem.

After you are finished transfering files,

Exit - Returns to packet BBS mode

The new/updated maps in the APRS directory are:

CALIF.MAP - Filled the map shell WB4APR sends with his distribution disk
with more northern & central California roads.

CAOBISBO.MAP - Covers south central coast between CA-LA.MAP and
CAGILROY.MAP

CA_DALY.MAP - Covers Daly City, San Bruno, Colma, and
Burlingame, and South San Francisco.

(Includes corrections from WB6LPG's GPS trips)

CAFSTRCTY.MAP - Covers Foster City and Redwood Shores area.
This is expanded from the map on the WB4APRS
distribution disk in that it includes Redwood
Shores.
(Includes corrections from WB6LPG's GPS trips)

CA_MATEO.MAP - Covers San Mateo, part of Burlingame, San
Carlos, Belmont, and a bit of Redwood City.
(Includes corrections from WB6LPG's GPS trips)

HALFMOON.MAP - Covers from Halfmoon Bay airport south to Pigeon Pt. and
east to Skyline Blvd.
(Includes partial corrections from WB6LPG's GPS trips)
73, Ken W7KKE @ KA6EYH.#NOCAL.CA.USA

Date: 04 Dec 93 17:43
Message-ID: <28010@WB3V>
From: WB4APR@WB3V
To: APRS@ALLUS
Subject: APRS Football Tracking Success!
Path: KI6EH!N6IYA!WD6CMU!KA6EYH!KA6EYH!WX3K!KI7AE!KQ4OK ...

This year we had three packet/GPS trackers attached to the chase vehicles for the Army/Navy game footbal run from Annapolis MD to the Meadowlands outside of NY City on 3 Dec. We were able to track the 1 watt 2m devices over the full 250 miles! Volunteer packet stations all along the route left their TNC's on so that we could use them as digipeaters, and W2HOB put up a temporary digi in southern NJ at 600 feet! Using only three hops, the once every 2 minute position reports made it all along the route ust fine!

Lessons learned: ALthough the position reports were very reliable, APRS messages to the mobiles often took 10's of minutes to be ACKed (if at all) towards the end of the route. This is the same reason that DIGI's are poor performers in normal packet. Ii is simple. If there is a 20% chance that a packet gets through the 3 digipeater path, then there is only a 4% chance that the ACK will get back to the sender! This is one of the main reasons that APRS avoids CONNECTED packet and ACKS. (I am working on an improved message send capability for APRS that tries to mimimize the need for ACKS)

Direction finding: With all the vehicles 100 miles out of Annapolis, a stuck transmitter in Baltimore jammed the frequency for 2 hours solid. Fortunately position reports were still being digipeated forward through the network into NJ, and N2CZF was digipeating them out onto the 40m HF APRS net, so that we still got the reports! All activity in Annapolis turned toward DFing. In minutes we had crossed bearing lines, but as more and more non APRS stations got involved the bearings deteriated! Later we found out that some reports were given by apartment dwellers moving around in their apartments with HT's and telling us which corner of their rooms gave the strongest signal! Although APRS plotted all these lines well, there was no real convergence. But since there was only one other APRS station on the map anywhere within 10

miles of the mess of lines, he was not home! When he finally was reached several hours later, long after the signal had disappeared, he could find no evidence that it was his transmitter. Anyway, as soon as the signal quit, the position reports came rolling in and all was well!

OTHERS: In addition to the GPS equipped chase vehicles, we also saw two other APRS GPS vehicles join the fun. N3JLQ was automatic-GPS mobile and N2MSM was manually entering his GPS position into his Porta-pkt TNC BText! Both stations hill-topped around the area of the entourage so that they could be used for digipeating to the big DIGI's... We also saw our first Xcountry APRS posit from WB6LPG in California! A total of 55 APRS stations were observed during the event and we all had fun!

990. Re: TEKK Radios

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-06 02:46:29 UTC
From: brian@nothing.ucsd.edu
Message-ID: <2du6e5INNp3j@network.ucsd.edu>
Source record: 50929

The TEKK radio is ok for simple 9600 bps links. The transmitter is ok, and shows good modulation response when used with the typical 9600 bps modem - I've tried the TAPR and K9NG, and others report G3RUH modems work ok. The RF is more-or-less clean. I'd recommend using a cavity or other filter on it in most circumstances, and if it's going to be in a place where there are other radios on nearby frequencies (such as at a repeater site), a circulator or isolator wouldn't be a bad idea.

The receiver is only fair. The front-end is easily smashed by strong signals, so you need additional selectivity if your site has any other transmitters nearby. The IF bandpass filters are not ideal for 9600 bps, but if you have nice strong signals and reduce the transmitted deviation, your digital signal will make it through ok. Performance is really poor at 9600 with weak signals, though.

I don't think I'm going to buy any more of them for our links. Maxar and Mitrek radios are available surplus for less and seem to be better.
- Brian

991. Re: MICOR on 9.6kbaud packet?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-06 02:52:08 UTC
From: brian@nothing.ucsd.edu
Message-ID: <2du6ooINNp5l@network.ucsd.edu>
Source record: 50928

UHF MICORs work fine at 9600 bps. Just shove the transmitted data stream into the modulator, which direct-FMs the offset oscillator. Pick the received data off pin 6 of the demodulator chip. As with most commercial radios, the IFs are just a tiny bit too narrow for 9600, but will work well if the signals are at least a few microvolts.

A word of caution: UHF mobile Micor output transistors are no longer available. These are highly-inefficient early RF devices, and tend to be somewhat fragile in repeater service. Pick up a few extra radios for spare parts.

Also, they're real power wasters. Be sure to have a fan on the heatsink if you're going to be using it in repeater or BBS service.
- Brian

992. Re: Misroutes to Namibia usa.na domain (was: wb7tpy gateway)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-06 02:59:28 UTC
From: aa963@Freenet.carleton.ca
Message-ID: <CHLEz4.Bwq@freenet.carleton.ca>
Source record: 50927

>
>I am copying this to the DNS administrator and postmaster for na, but to
>fully implement it will need some cooperation from a US gateway. So I
>suggest that you agree as to which gateways should be targets of a
>*.usa.na MX record and then the administrators of those gateways should
>follow up to the na DNS administrator.
>
>--
>David Woolley, London, England david@djwhome.demon.co.uk
>
Don't forget that Canada is also part of na but is *not* usa.
--
'86 Virago 1100 ---- My Amazon ... DoD # - 814
aa963@freenet.carleton.ca | carr@uranus.dgrc.doc.ca
ve3fhc@ve3osq#eon.on.can.na
Lloyd Carr --- Munster ON

993. The ALL NEW WB3FFV Amateur Radio BBS...

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-06 06:36:24 UTC
From: howardl@wb3ffv.ampr.org
Message-ID: <CHLp0p.GqD@wb3ffv.ampr.org>
Source record: 50934
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.packet

Hello Amateur Radio Operators,

I used to post this message here on USENET every couple months, but since the BBS software I was using was causing me so much trouble I avoided trying to have NEW users call while I tried to get things sorted out. Anyway I have installed NEW BBS software on the system, and with only a couple small issues left to work out, I decided to post this message announcing access to the BBS. I really hope to make this one of the BEST AMATEUR RADIO BBS systems in the world, so I am open to any comments or suggestions you might have if you choose to login and take a look around.

At the moment you can not telnet into the BBS from the Internet, but hopefully this will change in the not to distant future..

+--+
The ALL NEW WB3FFV Amateur Radio Telephone BBS !!!

I have placed a BBS system on-line that is mainly oriented towards the Amateur Community, but there is a lot more online as well. At this point in time I have hundereds of megabytes of files available for the BBS users, and through user support I hope to keep the latest and greatest ham software on-line for years to come. If you haven't tried this BBS system for a while then give it a call, as I have installed NEW BBS software that provides many new features that were never available before. The new software allows me to provide users with Internet E-Mail, plus full USENET access.

Below is the information that is needed in order to access the BBS via Telephone, please pass it around to as many ham's as possible.

System Name: WB3FFV
User Login: bbs

Number: (410)-661-2475 -- 1200,2400,4800,7200,9600,12000,14400,19200,38400
(V.32/V.32bis/V.42/V.42bis/MNP1-5/HST)

Number: (410)-661-2598 -- 1200,2400,4800,7200,9600,12000,14400,19200,38400+
(V.32/V.32bis/V.42/V.42bis/MNP1-5/PEP/Turbo-PEP)

Number: (410)-661-2648 -- 1200 & 2400 (MNP1-5/V.42bis), 9600 & 19200 (PEP)

Data Settings: 8 Bits, NO Parity, 1 Stop Bit
Times: 24hrs/365days (except for routine maintenance)
Software: XBBS (UNIX/Xenix Multiuser BBS) Version 7.95u
Misc. Info: Machine is an 80486-66 running UNIX V/386 and features more than 2.5 Gigabytes of on-line file storage.
Most transfer protocols are available!!

Sorry, FTP access is NOT currently available

I attempt to keep the latest and greatest HAM software on-line, and encourage all to upload anything new that they come up with, as it is of benefit to all. Here is a sample of a couple pieces of software that is available for DOWNLOAD:

KA9Q TCP/IP Software for the PC (Latest OFFICIAL release + TEST Versions)
KA9Q TCP/IP for the Atari-ST, MAC, & Amiga
KA9Q TCP/IP for UNIX based systems
KA9Q TCP/IP (The NOS release) [UNIX, MS/DOS, Amiga]
KA9Q TCP/IP (Version by G1EMM, PE1CHL, PA0GRI, WG7J, Etc.)
N2GTE Packet Message Switch [GTEPMS]
WA7MBL BBS for the PC
W0RLI BBS for the PC
MSYS BBS for the PC running KISS TNC's
AA4RE BBS for the PC (plus BETA versions)
F6FBB BBS for the PC
G8BPQ PC-Node
Various BBS utilities and enhancements
Several MORSE CODE Tutors
TheNet software by NORD><LINK
Modifications for many HAM Rigs and Scanners
Digital Signal Processing software (DSP)
DX and contesting programs

If you are interested in using UUCP to connect to the BBS, this can also be done as I support Anon-uucp. The login to the system is 'uucpanon', and there is NO password. The listing of avalible archives are stored in a file called 'FILES', and it is located in the /usr/spool/uucppublic. To retrieve the files listing just use the following command:

uucp wb3ffv!~/FILES /usr/spool/uucppublic (ASCII Text)
-or-
uucp wb3ffv!~/FILES.Z /usr/spool/uucppublic (16-Bit Compressed)
-or-
uucp wb3ffv!~/FILES.gz /usr/spool/uucppublic (GNU Gzipped)

This will move a copy of my files listing into your uucppublic directory. If you have any questions or problems, feel free to contact me at one of the numbers/adresses below. Good Luck...

Internet : howardl@wb3ffv.ampr.org | Howard D. Leadmon
UUCP : wb3ffv!howardl | Advanced Business Solutions
TELEX : 152252474 | 4107 Martin Avenue
FAX : (410)-661-0644 | Baltimore, MD 21236
PACKET : WB3FFV @ WB3FFV.MD.USA.NA | Phone: (410)-661-0447

994. Re: KPC-3: Remote Station Gets 'Busy' Replies??

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-06 07:10:37 UTC
From: AllanWS@cup.portal.com
Message-ID: <97545@cup.portal.com>
Source record: 50930

For my setup, I am using the terminal software that came with
the KPC-3. Nothing special..

Several people have replied that it could be a problem with
the DTR/DSR line to the TNC. Once a terminal is not detected
by the TNC it pulls the DTR line low and essentially shutting
down the TNC. I am wondering if there is a jumper inside allowing
me to bypass this somehow.
Some workarounds I have received includes setting the MONITOR command
to off so the buffer doesn't fill up, which works to the point it
does fill up :-). Another workaround is to direct connects to the
PBBS but I still run into the buffer full problems..
What I am scratching my head over is, why can a MFJ TNC work
but the KAM locks up? What is different? Better handling of
the DTR/DSR lines? At least I narrowed my problem down..

Al Schlaugat / allanws@cup.portal.com \ Amateur Radio: N9ISN
GO WISCONSIN BADGERS!! 1993 BIG TEN(ELEVEN) CHAMPIONS!!

995. Re: TNC Software for Amiga

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-06 14:30:12 UTC
From: roman@tix.timeplex.COM
Message-ID: <9312061430.AA01536@tix.timeplex.com>
Source record: 50925

Besides AmigaNOS for TCP/IP, the best packet software I have seen for
the Amiga is AmiPac and it is available on wuarchive.wustl.edu and
ucsd.edu for anonymous ftp'ing.
--
Dan Roman Internet: roman@tix.timeplex.com (prefered address) //
ccMail: roman_d@timeplex.com GEnie: D.ROMAN1@genie.geis.com \X/ Only AMIGA!

996. Busy on KPC-3

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-06 14:58:51 UTC
From: CELLIS%BROCKVMA.BITNET@CUNYVM.CUNY.EDU
Message-ID: <199312061620.IAA10235@ucsd.edu>
Source record: 50939

Friend of mine had that problem. Simple solution is to adjust the
USERS parm. probably set at 0. This restricts number of
"outside" users into TNC. Does not count you. make it whatever you
want.

****
ADMINISTRATIVE COMPUTING * Bitnet: cellis@brockvma
CARLTON ELLIS * Internet:
STATE UNIVERSITY OF NEW YORK * cellis@brockvma.cc.brockport.edu
COLLEGE AT BROCKPORT * -or-
350 NEW CAMPUS DRIVE * cellis@acspr1.acs.brockport.edu
BROCKPORT NY 14420-2924 * (716) 395-5153
****

997. When will we get digital cellular?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-06 17:47:33 UTC
From: "kevin.jessup" <kevin.jessup@mixcom.mixcom.com>
Message-ID: <1993Dec6.174733.27968@mixcom.mixcom.com>
Source record: 50842
Cross-posted to: alt.radio.scanner,rec.radio.scanner,rec.radio.amateur.digital.misc

I don't know where to post this, so I'll give this group a try.

I have been unable to get my wife to try for her technician class amateur radio licence. So, in the interest of some added security while she and my 4-year-old son are in the car, I am considering the purchase of a cellular phone.

I know that the current system is FDMA (frequency division multiple access) or "analog" cellular and is easily monitored. When will digital cellular become the norm? I've heard that 1994 is the introductory time frame for initial tests.

As I understand it, the digital system will use CDMA (code divison multiple access) and ALL the channels in a single "cell" will be "spread" (as in spread-spectrum) over a range of 1.228 MHz. This is certainly NOT equivalent to the existing analog hardware that uses narrow-band FM transmission "channels" every 30 kHz.

Of course, the marketing slime at Ameritech Mobile here in Milwaukee say (and I'll quote them) that that system "won't be in place for years". They also said that "the engineering staff is having great difficulty getting the digital system to work" and that "the existing cellular phones will not be obsolete for a long time". Sounds like BS to me!

If the digital stuff will not be around for 3 or 4 years I can understand the investment in analog. But if digital cellular will be available in a year or two, I'd rather not spend the money.

So should I buy an "analog" celluar phone or not? Any opinions?
Thanks.

--
/`-_ kevin.jessup@mixcom.com |
{ }/ Marquette Electronics, Inc | I suport publick skools! ;-)
\ / Milwaukee, Wisconsin, USA |
|__*| N9SQB, ARRL, Amateur Radio |

998. 80+miles range radio (phone) equipment needed- any advice

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-06 19:01:54 UTC
From: yuri@atmos.washington.edu
Message-ID: <2dvvj2$6nj@news.u.washington.edu>
Source record: 50931
Cross-posted to:
rec.radio.noncomm,rec.radio.shortwave,rec.radio.amateur.equipment,rec.radio.amateur.digital.misc,rec.radio.amateur.space

Hi,
and sorry for (may be) wrong group. My frined doesn't have access to Internet,
but he wants to have radiophone with 80+ (100+) miles range.
He said, that it should be somathing like (or better than) "Tomahawk-8000".
We will appreciateany places to call/price ranges-ANY ADVICE.

Please reply directly- I don't read these groups lately.

INTERNET: yuri@atmos.washington.edu
UUCP: uw-beaver!atmos.washington.edu!yuri

999. Re: ATM on Amateur Radio?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-06 20:35:10 UTC
From: willmore@iastate.edu
Message-ID: <willmore.755210110@metropolis.gis.iastate.edu>
Source record: 50937

karn@unix.ka9q.ampr.org (Phil Karn) writes:
>OSYSMAS@MVS.OAC.UCLA.EDU (Michael Stein) writes:
>|> ATM breaks packets up into cells, the idea being that an time
>|> critical (voice or video) packet can't affort to be held back
>|> because a long (4k bytes?) packet is being sent. So all packets
>|> are broken into cells, which can then be sent as needed (critical
>|> ones first).
>|>
>|> Well, it appears that this solves the problem. Only on a 1Gbit
>|> link a 4K byte packets is only 32 microseconds long so the
>|> problem doesn't really exist for this speed link!

>Absolutely! But you must understand the real driving factor behind the
>design of ATM: voice. For all their lip service of "integrated"
>voice/data/video services and supporting the Information Age, voice is
>still the telcos' bread and butter, and it's the only thing they
>consider important. For example, the specific frame size chosen for
>ATM (48 bytes of data + 5 bytes of header) was picked to minimize the
>packetizing delay for conventional 64kb/s digital voice, so as to
>avoid having to use echo cancellers to take care of reflections off of
>the hybrids in the analog local loops at the ends of a voice
>call. (The degree to which people object to an echo of a given
>amplitude is a strong function of its delay -- the longer the delay,
>the more annoying it is). To be sure, this choice was more the fault
>of the Europeans than the Americans, who wanted a somewhat larger cell
>size.

From my understanding of ATM when I studied it in a networking class, the
reason that the frame size was so small was to make the switching nodes
simpler in that they didn't need large buffers of variable size. Statistics
from the ATM research show that queues stay small because of this.

>Nevertheless, complaints from computer networking people that tiny,
>fixed-sized cells were not what they needed didn't seem to faze the
>telcos.

ATM just requires a protocol encapsulation/translation. Nothing much worse
than fragments in TCP/IP.

>|> Also my understanding is that currently all you can get today on
>|> ATM is a permanent virtual circuit, no "dial up". It appears
>|> that switched service is years away. And it's not clear how
>|> (if?) ATM will handle multicast traffic.

>A very common misconception about ATM, perhaps encouraged by the
>telcos themselves to sound more trendy, is that ATM is packet

>switching. It really isn't. First of all, ATM cells look nothing
>like, say, the Ethernet frames with which computer networking people
>are familiar: full source and destination addresses, followed by a
>variable length data field with a reasonably large size limit. And
>there's too little buffering in an ATM switch to make it a true packet
>network, where lots of little bursty users all contend for each link
>through a queue.

The first time a packet follows a path through any modern routing system,
the router will have to take extra time to compute the destination. Once
it has cached that address resolution, latter packets take less time to
route. Why should ATM be any different? Sure, it makes a packet switched
network look more like a virtual circuit network, but that's just reality.
Most packets go where one has already gone, anyway.

>So to achieve a reasonably low lost-cell rate in ATM, you have to set
>up a circuit in advance and preallocate some fraction of link
>bandwidth. If it isn't used, it goes to waste. Think of ATM as just
>another TDM (time division multiplex) switch, albeit with somewhat
>finer-grained control over the bandwidth allocations that can be
>made. Other than that, ATM doesn't do much that can't already be done
>by a much simpler cross-connect switch at far lower cost.

ATM would mostly be used to connect together LAN's into larger collections.
With that in consideration, why wouldn't the traffic be fairly steady
between nodes? It's not like ATM was supposed to run to peoples houses
directly.

>|> Remember, ATM is brought to you by the same people who designed
>|> ISDN as the answer to local telephone service. Will it follow
>|> the same installation / availability / cost path?

>Most likely, or even worse. ISDN's and ATM's "features" are worse than
>useless to anyone trying to build a real packet switched network like
>the Internet. Oh sure, you *can* use them, and people do when the
>tariffs are right. But all that added complexity buys you nothing over
>a bunch of leased lines. Hence they're worse than useless.

>In the case of ISDN, I don't know anyone who uses it as anything but a
>leased line substitute between local packet routers. And this happens
>only when the telcos price ISDN far enough below their traditionally
>overpriced leased line services to make it worth dealing with ISDN's
>many added hassles. Of course, if the telcos were to price all their
>services according to their true costs, ISDN would immediately
>disappear and they'd have to admit their mistake.

ISDN didn't work out because it took so long to get some switches upgraded.
This brought broadband ISDN closes and caused some of the market demand to
decide to wait for B-ISDN. *sigh* Things like that happen. Remember Floptical
Drives? They took too long to get to get to market that other technology
like 128Meg MO drives and 140Meg MD drives beat them out.

>Raw digital transmission, at least along major fiber routes, is the
>one thing the telcos know how to do well. Unfortunately, getting just
>that service out of them at a reasonable price is very difficult. Raw
>transmission isn't "glamorous" enough for the telcos, so they keep
>trying to "do it all" (e.g., move into information
>services). Unfortunately, they don't even know how to properly
>*switch* data, much less provide the complete stack including the
>applications.

With this, I can agree. All I want is a T1 line... *sigh*

>|> What does this have to do with Amateur Radio? Well, I've been
>|> thinking about all the claims that there isn't enough spectrum to
>|> do Gigabit networking via RF. Really? What about local and line
>|> of sight links in the 24Ghz to 100Ghz range? Sounds hard (a
>|> challange) today, but doesn't sounds like it will remain so...

>Well, IF we were to use ATM, then those claims about insufficient
>spectrum would be true. If we don't, there shouldn't be a problem. :-)

Good dig, but I'm not convinced that ATM is the best for radio use. Let
me rephrase that. ATM is very poor for radio use. One of the prime
assumptions of ATM was that the physical carrier had a very low bit error
rate. Radio doesn't exactly meet that specification.

Cheers,
David (N0YMV)
--

----
willmore@iastate.edu | "Death before dishonor" | "Better dead than greek" |
David Willmore | "Ever noticed how much they look like orchids? Lovely!" |

1000. Questions on PacComm Micropower 2 TNC

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-06 20:41:32 UTC
From: keenan@phakt.usc.edu
Message-ID: <2e05ds$7eb@phakt.usc.edu>
Source record: 50935

What are the differences between the Micropower 2 and the Tiny 2 TNC?
(I know the power consumption is lower on the Micropower 2) Does it come
with a 10MHz CPU? I notice this is an option available for the Tiny 2,
but is not listed for the Micropower.

Also, does anyone have the phone number for NX2P Electronics?

Thanks,

Robert Keenan, WU6L
keenan@usc.edu

1001. Re: When will we get digital cellular?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-06 21:21:14 UTC
From: tim@umcc.umcc.umich.edu
Message-ID: <2e07oa$as0@umcc.umcc.umich.edu>
Source record: 50938
Cross-posted to: alt.radio.scanner,rec.radio.scanner,rec.radio.amateur.digital.misc

In article <1993Dec6.174733.27968@mixcom.mixcom.com>,
kevin.jessup <kevin.jessup@mixcom.mixcom.com> wrote:
>
>I know that the current system is FDMA (frequency division multiple
>access) or "analog" cellular and is easily monitored. When will

It isn't really FDMA...

>digital cellular become the norm? I've heard that 1994 is the
>introductory time frame for initial tests.
>
1994 for your area, perhaps. Some other locations have been testing
it, & even had it operational for a few years.

>As I understand it, the digital system will use CDMA (code divison
>multiple access) and ALL the channels in a single "cell" will be
>"spread" (as in spread-spectrum) over a range of 1.228 MHz. This
>is certainly NOT equivalent to the existing analog hardware that
>uses narrow-band FM transmission "channels" every 30 kHz.

There are two types of digital systems in use/study. TDMA & CDMA. Part
of the delay of areas switching to digital systems is that the service
providers & CMT manufacturers are still waiting for one standard to win
out. Both the TDMA & CDMA supporters are squabbling over which system
will be more efficient, etc.

>Of course, the marketing slime at Ameritech Mobile here in Milwaukee
>say (and I'll quote them) that that system "won't be in place for years".

Probably true.

>They also said that "the engineering staff is having great difficulty
>getting the digital system to work"

Translated, this means "We're still trying to figure out which digital
system to invest in."

and that "the existing cellular phones
>will not be obsolete for a long time". Sounds like BS to me!

This is true. It would be a PR nightmare if they announced "well
folks, we've got a new system on-line, so your current CMTs that you've
spent $____ on will be obsolete in a year, but don't worry, we'll be happy
to sell you a (TDMA/CDMA) phone for $750!" The analog stuff will be
slowly phased out over 4 or 5 years.

>So should I buy an "analog" celluar phone or not? Any opinions?

Either buy a used one for about $100+ (but make sure you don't get
locked into habving to buy service from one company), or rent one.
If you have reason to believe that your area will be going with
TDMA, you can buy a 'dual-mode' TDMA/analog CMT, use it on analog
now, & use it on TDMA in the future.

Contrary to the rot you read in some of the 'hobbyist' magazines like
PC & MT, digital cellular systems have been operational in some areas for
a while. I think the first city to go full digital (CDMA, if I remember
right) was some city in Canada -- Calgary perhaps.

>Thanks. > >--
> /`-_
kevin.jessup@mixcom.com |
> { }/ Marquette Electronics, Inc | I suport publick skools! ;-)
> \ / Milwaukee, Wisconsin, USA |
> |__*| N9SQB, ARRL, Amateur Radio |

--
Tim Tyler Internet: tim@ais.org MCI Mail: 442-5735 GEnie: T.Tyler5
P.O. Box 443 C$erve: 72571,1005 DDN: Tyler@Dockmaster.ncsc.mil
Ypsilanti MI AOL: Hooligan Packet Radio: KA8VIR @WB8ZPN.#SEMI.MI.USA.NA
48197 "Celebrate diversity -- get intolerant about something!"

1002. HAM-server index file

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-06 22:02:31 UTC
From: HAMSinfo@GRAFex.sbay.org
Message-ID: <gate.755215351@GRAFex.sbay.org>
Source record: 50840
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc

```
Executed: Mon Dec 06 16:57:19 1993

NOTES: ----------------------------------------------------------------------

Mac Catch 22: .HQX files need to be de-binhexed. All others must be
uudecoded. Order UUTOOL.HQX for uudecode tool.

If you do not know how to use HAM-server, send email to
HAM-server@GRAFex.sbay.org. In the text, place HELP.

If you order a file and do not get it, check the index to be sure you have
spelled the filename correctly. If you have ordered the file correctly,
then order a new INDEX, as I may have moved the file to a different
directory. The system is still expanding, and I am trying to keep it in
managable chunks.

Also, if you have ordered files from HAM-server and do not receive them, it
might be because your return path is incorrect. My bounce mailbox fills up
quite regularly with bounce messages. And, since the path is incorrect, I
cannot contact you to let you know.

Orders must be sent to HAM-server. Orders sent to KA6ETB or HAMSinfo are
ignored. If you are reading this from usenet, do not respond to this post.
You must send email to HAM-server@GRAFex.sbay.org.

A new INDEX is automatically generated weekly and when files are moved or
added.

The archives may contain the same file under different names. If you should
run across one of these, please let me know with email to
KA6ETB@GRAFex.sbay.org

-------------------------------------------------------------------------------

Directory: /hamradio/

00-INDEX.TXT 10155 11-21-93

Directory: /hamradio/10meters/

10MBEACO.LST 6233 3-26-93

Directory: /hamradio/advanced/

ADV21.ZIP 103501 6-18-93
ADVANCED.FRQ 1275 8-15-91

Directory: /hamradio/antennas/
```

ANTENNAS.BAS 2227 3-26-93
ANTENNAS.TXT 7771 2-02-93
BUTERNUT.TXT 6106 3-26-93
CRPT2NTA.TXT 10713 2-02-93
DISCONE.TXT 1805 3-26-93
LOADPOLE.ZIP 7542 3-01-93
MININEC3.ZOO 164929 3-01-93
MOBILE.TXT 4458 3-26-93
PORTABLE.ANT 1735 5-26-93
YAGIMAX.ZIP 352305 3-01-93

Directory: /hamradio/arrl/

ARRLBBS.TXT 3153 3-03-93
ARRLDIGI.TXT 23303 2-02-93
ARRLINDX.TXT 17591 3-02-93
ARRLINFO.TXT 3321 2-02-93
ARRLJOB.TXT 18455 2-02-93
ARRLLOGO.PS 2911 2-02-93
ARRLPIO.TXT 116131 2-02-93
QSLBURO1.TXT 14440 2-02-93
QSLBURO2.TXT 10117 2-02-93

Directory: /hamradio/bandplan/

BANDPLAN.DOC 2528 3-24-92
PLAN129.TXT 1928 8-12-91
PLAN222.TXT 585 12-22-91
PLAN2M.TXT 522 8-12-91
PLAN440.TXT 572 8-12-91
PLAN6M.TXT 249 8-12-91
PLAN900.TXT 1108 8-12-91

Directory: /hamradio/callbook/

CALBK-WP.TXT 4064 8-17-92
CALLBOOK.C 18991 3-26-93
CLBK-ARY.TXT 1592 12-28-90
CLBK-EYH.TXT 1480 3-07-93
CLBK-INT.TXT 2280 3-06-93
CLBK-IYA.TXT 556 11-23-91

Directory: /hamradio/contests/

CONTEST.ARC 25065 3-01-93
CONTEST.ZIP 147989 3-01-93
CT626.ZIP 178372 3-01-93
UNIGRID2.BAS 12341 3-26-93
WHATSON.ARC 15826 3-01-93
WLOGDEMO.ZIP 163276 3-01-93
WRTLOG60.ZIP 836615 6-08-93

Directory: /hamradio/dx/

AUTOLOG4.ARC 165621 3-01-93
DXB20DMO.ZIP 129658 3-01-93
DXCC.ARC 10079 11-11-93
DXCC.LIS 15783 11-11-93
DXCC104.ARC 120117 3-01-93
DXCCK2DI.TXT 15904 2-02-93
DXCCTXT.Z 7080 11-11-93
DXLOCATE.LST 35911 3-26-93
DXLOG185.ZIP 171738 3-01-93
HAM_LOG.ZIP 94848 3-19-93
HFPROP.BAS 12300 3-26-93
LOGBOOK.ARC 104668 3-01-93
LOGBOOK.ZIP 83422 3-19-93
SLOVENIA.FRQ 4150 10-03-93

Directory: /hamradio/exams/

AUTOEXAM.ZIP 251630 3-01-93
EXAMCRDT.TXT 6490 2-02-93
EXAM_OPS.TXT 7431 2-02-93
HAMQUIZ.ZIP 101015 3-19-93
HAMSTACK.TXT 3439 2-02-93
HANDICAP.TXT 9632 2-02-93
VEFC24.ARC 26774 3-01-93

Directory: /hamradio/extra/

EXT21.ZIP 99672 6-18-93
EXTRA.FRQ 1157 8-25-91

Directory: /hamradio/general/

GEN012.ZOO 24160 6-18-93
GEN21.EXE 83879 3-19-93
GEN21.ZIP 72931 6-18-93
GENTEST.EXE 136865 1-11-92

Directory: /hamradio/help/

BCUMAHAM.TXT 5156 3-28-93
BITFTP.HLP 11347 5-09-93
ELMER100.ZIP 65425 3-01-93
ELMERS.DIR 46722 3-07-93
ELMRINFO.TXT 6984 2-02-93
ELMRLIST.TXT 46722 3-07-93
FAQ.TXT 9164 11-28-93

Directory: /hamradio/hf/

COMB6.ZIP 43190 3-01-93
GC103.ARC 23776 3-01-93
MICROMUF.BAS 4881 3-01-93
MICROMUF.PAS 7695 3-01-93
SOL_GEO.DAT 24836 2-02-93

SOL_TERA.TXT 27028 2-02-93

Directory: /hamradio/internet/

FTPSITES.TXT 3480 6-06-93
GATEWAYS.TXT 5785 2-02-93
HAMEMAIL.TXT 223537 2-02-93
MAILGATE.TXT 22734 11-18-93
NEWSGRPS.TXT 6917 2-02-93
RECINFO.TXT 9252 3-14-93
USNETSEL.TXT 8164 2-02-93

Directory: /hamradio/macstuff/exams/

ADVANCED.SIT 133986 4-11-93
EXTRA.SIT 128944 4-11-93
GENERAL.SIT 97148 4-11-93
NOVICE.SIT 121453 4-11-93
TECH.SIT 107031 4-11-93
TSTADVAN.HQX 536625 11-11-93
TSTEXTRA.HQX 476347 11-11-93
TSTGEN.HQX 320149 11-11-93
TSTNOV.HQX 409007 11-11-93
TSTTECH.HQX 341519 11-11-93

Directory: /hamradio/macstuff/misc/

FRQVALET.HQX 114671 11-21-93
MACSOFT.TXT 28948 11-21-93

Directory: /hamradio/macstuff/morse/

CODE1_0.HQX 44302 11-11-93
CODETUTR.HQX 23957 11-11-93
MAC525_1.HQX 89968 8-17-93
MAC535.HQX 122083 8-17-93
MANIA.HQX 48803 11-11-93
MASTER.HQX 58146 11-11-93
MORSE.MAC 263 3-02-91
MORSE.HQX 16369 11-11-93
MORSE1_1.HQX 16568 11-11-93
TRAINER.HQX 121407 11-11-93

Directory: /hamradio/macstuff/packet/

SAVANTDM.HQX 178005 8-17-93
SAVNTUPD.HQX 80757 8-17-93

Directory: /hamradio/macstuff/tcpip/

SOFTKISS.HQX 145274 8-17-93

Directory: /hamradio/macstuff/tcpip/mac-nos/

CONFIG.HQX 424 9-27-93
IM10B27N.HQX 483 9-27-93
NET2325.CPT 198493 9-27-93
NET2325.HQX 325 9-27-93
NET2326.CPT 198431 9-27-93
NET2326.HQX 330 9-27-93
NOSINTRO.MSW 69121 4-23-92
TCP_IP.SIT 172688 9-27-93

Directory: /hamradio/macstuff/utility/

CPTXPAND.HQX 18256 11-21-93
DEARJ.SIT 14776 11-18-93
MACGZIP.CPT 140672 11-18-93
STUFLITE.BIN 465987 11-18-93
UUTOOL.HQX 76605 11-18-93

Directory: /hamradio/misc/

9PN-25PN.TXT 676 3-27-93
AUTOLOG.ZIP 109886 3-19-93
BATTRIES.TXT 9694 2-02-93
BBS_LIST.TXT 41800 2-28-93
BEACONS.INF 2284 7-29-92
CA-PHONE.BBS 1338 11-06-92
CHART.C 1999 3-26-93
CHURCVR.TAR 491520 8-04-93
CONDOR.INF 2870 9-26-92
CONDORMP.TXT 3486 7-16-89
EASYLOGR.ZIP 228482 3-19-93
ELMER.INF 9129 11-21-93
ELMER.LST 53132 11-21-93
FCC-PRB1.TXT 25754 4-05-93
FIELDDAY.EXE 239510 11-11-93
FLNTALAW.TXT 3528 2-02-93
HAMPLTES.TXT 5507 2-02-93
HAM_READ.ARC 1366 3-19-93
K1EA-619.EXE 315212 3-19-93
K2UYH.ARC 108510 3-19-93
LOGOS.PS 9258 2-02-93
MAILORDR.TXT 20383 2-02-93
MAP.ZIP 802214 3-19-93
MARS.FRQ 987 8-28-93
NICADS.INF 6533 3-26-93
PRO-2004.MOD 4418 3-26-93
PRO-2004.REV 18797 3-26-93
QSLCARD1.PS 27337 3-26-93
QSLCARD2.PS 6399 3-26-93
RFI.TXT 1991 3-17-93
RFI001.TXT 2158 6-08-89
RFI002.TXT 1815 6-08-89
RFI003.TXT 3288 6-08-89

RFI_TIPS.TXT 5948 2-02-93
SCANNER.MOD 5287 3-26-93
SMITHCHA.PS 23664 3-26-93
UC-U2AT.REV 7239 3-26-93
VHFPROP.BAS 24498 3-26-93

Directory: /hamradio/mods/

2ETO2AT.MOD 1443 8-07-93
56KBFIX.MOD 1093 5-26-93
741AMODS.ZIP 8974 5-26-93
760XLT.MOD 490 5-26-93
ALLBAND.MOD 2870 5-26-93
ALR22T.MOD 2152 5-26-93
BC205XLT.MOD 4221 5-26-93
DJ-580 155310 5-26-93
DJ500.MOD 2885 5-26-93
DR510.MOD 4186 5-26-93
FRQSGALR.ZIP 206290 5-26-93
FT-530.MOD 2302 8-07-93
FT101E.MOD 2639 5-26-93
FT209RH.MOD 1034 5-26-93
FT212RH.MOD 1345 5-26-93
FT23R.MOD 776 5-26-93
FT411.MOD 4824 5-26-93
FT411-2.MOD 1026 5-26-93
FT470-2.MOD 9942 5-26-93
FT470-3.MOD 1951 5-26-93
FT4700.MOD 1195 5-26-93
FT727CAT.MOD 2520 5-26-93
FT727R.MOD 1071 5-26-93
FT747GX.MOD 1221 5-26-93
FT767GX.MOD 1452 5-26-93
HT-24-T.MOD 3581 7-24-93
IC-24.MOD 2071 5-26-93
IC-MU2.MOD 1186 5-26-93
IC02.MOD 2082 5-26-93
IC02-2.MOD 1231 5-26-93
IC02-3.MOD 861 5-26-93
IC04.MOD 1897 5-26-93
IC24-2.MOD 993 5-26-93
IC24-3.MOD 5387 5-26-93
IC2410.MOD 4437 5-26-93
IC28.MOD 479 5-26-93
IC2SAT.MOD 4994 5-26-93
IC2SAT-2.MOD 8131 5-26-93
IC32.MOD 2501 5-26-93
IC32-2.MOD 2719 5-26-93
IC3200A.MOD 452 5-26-93
IC37.MOD 3900 5-26-93
IC735IBM.MOD 1407 5-26-93

IC900.MOD 2945 5-26-93
ICOM32AT.MOD 1937 5-26-93
ICOM735.1 3614 5-26-93
ICOM735.2 1380 5-26-93
ICOM735- 3614 5-26-93
ICW2A.MOD 13392 5-26-93
KAMDCD.MOD 2048 5-26-93
KENWD930.MOD 6640 5-26-93
NOAASTNS.ZIP 20995 5-26-93
PK232LOK.MOD 1858 5-26-93
PORTABLE.ANT 1735 5-26-93
PRO2004.MOD 5157 5-26-93
PRO2005.MOD 2602 5-26-93
PRO2006.MOD 3119 5-26-93
PRO2020.MOD 4775 5-26-93
PRO34.MOD 1239 5-26-93
R7000.MOD 3404 5-26-93
R7000-2.MOD 26880 5-26-93
RADIO.MOD 4915 5-26-93
RDIOMODS.SRV 956 5-26-93
TC2DUPLX.MOD 1581 5-26-93
TH-215A.MOD 2174 3-26-93
TH215 2072 5-26-93
TH215.MOD 2227 5-26-93
TH225.MOD 2932 5-26-93
TH25.MOD 7811 5-26-93
TH27A 6725 5-26-93
TH28A 2608 5-26-93
TH75.MOD 1385 5-26-93
TINY2TNC.MOD 1431 5-26-93
TM-721A.MOD 4867 3-26-93
TM-741-M 17526 5-26-93
TM2570A.MOD 778 5-26-93
TM321A.MOD 600 5-26-93
TM321A-2.MOD 957 5-26-93
TM321A-3.MOD 1415 5-26-93
TM421A.MOD 1836 5-26-93
TM701.MOD 2979 5-26-93
TM701A.MOD 280 5-26-93
TM721.MOD 4228 5-26-93
TM721-2.MOD 2784 5-26-93
TM721-3.MOD 6073 5-26-93
TM721A 13389 5-26-93
TM731.MOD 1612 5-26-93
TM741.MOD 1230 5-26-93
TM941A-2.MOD 2723 5-26-93
TNC2.MOD 1589 5-26-93
TNC2A.MOD 3329 5-26-93
TS-930S.MOD 2226 3-26-93
TS140.MOD 563 5-26-93

TS430.MOD 825 5-26-93
TS430-2.MOD 844 5-26-93
TS430MOD.DOC 2719 3-26-93
TS430S.REV 5066 3-26-93
TS440.MOD 1589 5-26-93
TS440-AT.MOD 971 5-26-93
TS440S.INT 9986 3-26-93
TS680.MOD 514 5-26-93
TS680-2.MOD 2940 5-26-93
TS711.MOD 123 5-26-93
TS790A.MOD 5059 5-26-93
TS850-1.MOD 12088 5-26-93
TS850-2.MOD 9086 5-26-93
TS930.MOD 6931 5-26-93
TS940IBM.MOD 2539 5-26-93
U2AT.MOD 3161 5-26-93
UNI2510.MOD 1622 5-26-93
W21AT.MOD 4330 10-10-93

Directory: /hamradio/morse/

AUTOCW.ARC 60849 3-01-93
CODETEST.HIN 7287 3-26-93
CW.ARC 62536 3-01-93
CW104.ZIP 83367 3-01-93
CWDEMO.ZIP 573318 11-11-93
FFTMORSE.ZIP 27344 3-01-93
HAMCOM21.ZIP 182531 3-01-93
MACHINE.ARC 13061 3-01-93
MOR21.ZIP 53013 6-18-93
MORSE.BAS 5661 3-01-93
MORSE30B.ZIP 71113 3-01-93
MORSETST.BAS 7179 3-01-93
PROCW.ZIP 24227 3-01-93
ROBOCOPY.ZIP 27346 3-01-93
SM316.ZIP 109484 3-01-93
SUPERIOR.SHR 99149 11-25-93

Directory: /hamradio/mswin/

DSP2D_UP.ZIP 26368 11-11-93
GMAIL.TXT 110 11-11-93
GMAIL.ZIP 78712 11-11-93
ICMPCMD.ZIP 3294 11-11-93
MSWINNOS.ZIP 4014 11-11-93
NETSORT.ZIP 1505 11-11-93
QVTNET23.ZIP 212649 11-11-93
RTSORT.ZIP 8192 11-11-93

Directory: /hamradio/newfiles/

AMPR.ORG 409718 7-06-93
FRQSGALR.ZIP 206290 5-26-93
NETAMSRC.ARC 56320 9-29-93
NETMAC52.SIT 178633 9-29-93
NETMAC55.SIT 179770 9-29-93
NET_AMIG.ARC 108322 9-29-93
NET_BM.ARC 37772 9-29-93
NET_DES.ARC 26249 9-29-93
NET_DOC.ARC 143194 9-29-93
NET_EW.ARC 115955 9-29-93
NET_MAC.HQX 223461 9-29-93
NET_READ.ME 2443 9-29-93
NOAASTNS.ZIP 20995 5-26-93
NOS_KIT.DOC 4313 11-05-93
NOS_KIT.ZIP 659372 11-05-93
NTEX_MS.ARC 118873 3-19-93
PCECAP.ZIP 100174 3-19-93
TEC20.ZIP 88796 3-19-93
TEC21.EXE 95783 3-19-93
TRAVINFO.LST 38204 3-26-93
TUNEUP.TNC 2557 7-03-91
UC-U2AT.REV 7239 3-26-93
WIRETAP.TXT 32215 3-26-93

Directory: /hamradio/newsltrs/

MLH01.TXT 3986 6-03-93
MLH02.TXT 3631 6-03-93
MLH03.TXT 3933 6-03-93
MLH04.TXT 4815 6-03-93
MLH05.TXT 6136 6-03-93
MLH06.TXT 7803 7-06-93
MLH07.TXT 3665 6-03-93
MLH08.TXT 5446 6-03-93
MLH09.TXT 4449 6-03-93
MLH10.TXT 3827 6-03-93
MLH11.TXT 4224 5-31-93
MLH12.TXT 3072 5-31-93
MLH13.TXT 6512 5-31-93
MLH14.TXT 5248 5-30-93
MLH15.TXT 6231 7-07-93
MLH16.TXT 6272 10-06-93
MLH1.TXT 3986 6-03-93
MLH17.TXT 6016 11-25-93

Directory: /hamradio/novice/

NOV21.EXE 106365 3-19-93
NOVICE25.ARC 50049 3-01-93
NOV_TEST.ZIP 95588 3-01-93

Directory: /hamradio/nts/

3RDPARTY.LST 1802 9-09-91
CANADA.ADR 375 2-14-90
COUNTRY.ADR 2975 11-25-91
NTS12.ZIP 93145 6-18-93
NTSDISK.EXE 37401 11-20-91
RGRAM27.ZIP 48027 3-19-93
ZIPKEY.ZIP 198368 11-11-93

Directory: /hamradio/os2/

OS2NOSV4.ZIP 262476 11-11-93
OS2PMAIL.ZIP 36178 11-11-93
OS2SPEED.ZIP 2050 11-11-93
PMNOS1DS.ZIP 843122 11-11-93
PMNOS1DX.ZIP 377128 11-11-93

Directory: /hamradio/packet/

9600BAUD.PKT 8154 3-06-91
A802MANP.TXT 35627 8-10-93
AMTORFRQ.TXT 9158 10-13-93
ARYGATE.TXT 10286 4-11-93
AUTOBPQ.ZIP 92993 9-04-93
AX25SPEC.TXT 66235 3-30-93
BBSTIP01.TXT 1435 1-04-91
BBSTIP02.TXT 1868 1-04-91
BBSTIP03.TXT 1869 1-04-91
BBSTIP04.TXT 2032 1-04-91
BBSTIP05.TXT 2196 1-04-91
BBSTIP06.TXT 1132 1-04-91
BBSTIP07.TXT 1180 1-04-91
BBSTIP08.TXT 863 1-04-91
BBSTIP09.TXT 2260 1-04-91
BBSTIP10.TXT 1325 1-04-91
BBSTIP11.TXT 1755 1-04-91
BBSTIP12.TXT 2222 1-04-91
BBSTIP13.TXT 2305 1-04-91
CATEGORY.LST 3477 1-26-92
CHEAPPKT.TXT 4258 3-30-93
FAQ.TXT 33570 3-08-93
FAQ_PAKT.TXT 29942 2-02-93
HFBBS.TXT 19833 10-13-93
HFHINTS.TXT 3020 4-05-90
HI-SPEED.NET 15864 8-07-93
HIERADR.DOC 4849 6-15-90
INFOPAKT.TXT 39574 2-02-93
KAM401.ARC 156061 3-01-93
NEXTGEN.BBS 3948 3-21-93
PKTINFO1.TXT 2891 2-20-93
PKTINFO2.TXT 6338 2-02-93
ROUTING.TXT 28069 3-26-93
RTTY12G.ARC 126651 3-01-93

SETTINGS.TNC 1089 7-03-91
TTY37.ARC 36600 3-01-93
WP.DOC 1507 5-09-93
XPCOM131.ZIP 403741 5-29-93

Directory: /hamradio/packet/loz/

00-INDEX.TXT 2446 4-19-93
PACKET01.LOZ 3746 3-03-93
PACKET02.LOZ 9436 3-04-93
PACKET03.LOZ 6675 3-07-93
PACKET04.LOZ 7372 3-10-93
PACKET05.LOZ 6155 3-17-93
PACKET06.LOZ 15037 3-23-93
PACKET07.LOZ 5707 5-11-92
PACKET08.LOZ 6715 5-12-92
PACKET09.LOZ 4578 5-12-92
PACKET10.LOZ 8698 1-31-93
PACKET11.LOZ 6493 1-31-93
PACKET12.LOZ 5881 5-13-92
PACKET13.LOZ 6285 5-29-92
PACKET14.LOZ 7157 5-13-92
PACKET15.LOZ 4714 5-14-92
PACKET16.LOZ 3396 5-14-92
PACKET17.LOZ 4683 5-14-92
PACKET18.LOZ 2168 5-14-92
PACKET19.LOZ 4902 5-15-92
PACKET20.LOZ 7564 5-15-92
PKTINF01.TXT 4109 7-22-91
PKTINF02.TXT 6580 7-28-91
PKTINF03.TXT 4555 8-06-91
PKTINF04.TXT 3806 8-12-91
PKTINF05.TXT 4484 8-21-91
PKTINF06.TXT 4192 9-03-91
PKTINF07.TXT 4885 9-09-91
PKTINF08.TXT 4676 9-17-91
PKTINF09.TXT 3938 10-01-91
PKTINF10.TXT 2786 10-28-91
PKTINF11.TXT 3412 11-12-91
PKTINF12.TXT 7717 11-26-91
PKTINF13.TXT 2480 12-17-91
PKTINF14.TXT 2499 1-06-92
PKTINF15.TXT 2975 1-06-92
PKTINF16.TXT 1646 1-14-92

Directory: /hamradio/packet/software/

APL700.EXE 412928 8-26-93
FE.ZIP 16626 7-14-93
GP.DOC 125349 7-24-93
GP-1X50.ZIP 370518 7-06-93

LLINK220.ZIP 375144 11-21-93
PAX285.ZIP 15395 7-14-93
PCT214.ZIP 378739 3-01-93
PKGOL624.ZIP 323067 3-26-93
PKTSFTWR.TXT 4185 2-02-93
RTTY12G.ARC 126651 3-01-93
SELCAL11.ZIP 12590 3-01-93
TTY37.ARC 36600 3-01-93
XPCOM131.ZIP 403741 5-17-93

Directory: /hamradio/packet/software/aa4re/

AA4REBBS.INF 2654 4-11-93
AA4REBBS.ZIP 357277 3-19-93
B21TANSI.ZIP 3620 5-26-93
BB21HC.ZIP 259837 5-26-93
BB21HL.ZIP 110380 5-26-93
BB21HN.ZIP 358648 5-26-93
BB21HP.ZIP 239199 5-26-93
DOC211.ZIP 99644 5-26-93
HH21H.INF 1377 5-26-93
MBB35SRC.ZIP 72475 5-26-93
MBBIOS35.ZIP 29299 5-26-93
MBBIOS38.ZIP 39704 5-26-93
WATCHDOG.ZIP 8425 5-26-93

Directory: /hamradio/packet/software/dsp/

DOC.ZIP 301000 9-02-93
DSP105.ZIP 46817 9-02-93
DSP4SCHE.ZIP 238499 9-02-93
DSPTIPUP.ZIP 21417 9-02-93
SOURCE.ZIP 671625 9-02-93

Directory: /hamradio/packet/software/g8bpq/

BPQ405E.ZIP 143360 5-26-93
BPQ406.ZIP 170880 5-26-93
BPQ406A.ZIP 20216 5-26-93
BPQ406E.ZIP 181926 5-26-93
RSWD0330.ZIP 66213 5-26-93
RZSW30.ZIP 97411 5-26-93
TFPCX.ZIP 34817 5-26-93

Directory: /hamradio/packet/software/thebox/

BOOTARC.EXE 243874 7-19-93
INSTALL.BAT 174 7-19-93
NOS_1229.EXE 203295 7-06-93
NOS_1229.LP 172009 7-06-93
NOS_1229.MAN 221639 7-06-93
NOS_1229.MAP 75531 7-06-93
NOS_1229.NR 168281 7-06-93

NOS_1229.VER 52 7-06-93
SOURCARC.EXE 131999 7-19-93
SYSARC.EXE 105377 7-19-93
SYSOP15.ENG 65121 7-19-93
UPDATE.BAT 1354 7-19-93

Directory: /hamradio/packet/software/thenet/

THENET.FLA 6498 7-19-93
THENET.INF 4005 7-19-93
THENET.PAR 3692 7-19-93
TNET-X1G.TXT 68 7-19-93
TNET-X1G.ZIP 119680 7-19-93
TNET-X1H.ZIP 123904 7-19-93
TNET-X1J.EXE 218857 11-11-93
TNET-X1J.TXT 280 11-21-93
TNET-X1J.ZIP 335650 11-11-93
X1JDEV.EXE 116275 11-11-93

Directory: /hamradio/packet/software/f6fbb/

FBB515.ZIP 991152 7-30-93
TPK181.ZIP 579533 7-30-93

Directory: /hamradio/packet/software/wa7mbl/

OIZ-UTIL.ARC 64062 7-30-93
REQDIR.ARC 34438 7-30-93

Directory: /hamradio/packet/software/wa8ded/

TNCDED.DOC 29130 7-30-93
TNCDED.HEX 45068 7-30-93
TNCDED.MSG 4116 7-30-93
WA8DED 1004 7-30-93
WA8DED.DOC 14790 7-30-93
WA8DED.ROM 19284 7-30-93

Directory: /hamradio/packet/tcpip/

00-INDEX.TXT 1602 6-08-93
AMPR.ORG 409718 7-06-93
AMPRHOST 303457 7-06-93
AMPRINFO.TXT 5603 2-02-93
AMPRXORG.REV 516969 7-06-93
ASMOBJ.MSG 607 6-08-93
ASMOBJ.ZIP 6766 6-08-93
BMEXE332.ZIP 30898 6-08-93
BMSRC_ST.ARC 25334 8-07-93
CONNEX.Z 12030 7-06-93
E920603.ZIP 189423 6-08-93
EXPIRY.ZIP 53196 6-08-93
HELP_V02.ZIP 11984 7-06-93

INTRONOS.ZIP 54272 7-06-93
MAN-9106.ZIP 57169 6-08-93
NAN24HYC.ZIP 42635 6-08-93
PCNET.EXE 227498 4-26-92
PKTDRVR.INF 157 6-08-93
S920603.ZIP 656302 6-08-93
SATTRACK.ZIP 34886 7-06-93
SLFP123.ZIP 30476 6-08-93
TCPIP.INF 5818 6-02-93
VIEW9206.ZIP 384591 6-08-93

Directory: /hamradio/packet/tcpip/bm/

BM.DOC 16641 9-02-93
BM332C.TXT 235 9-02-93
BM332C.ZIP 52889 9-02-93
BMEXE.ARC 38547 9-02-93
BMH02.TXT 790 9-02-93
BMH02EXE.ZIP 300305 9-02-93
BMH02SRC.ZIP 60096 9-02-93
BMUTIL.ZIP 11546 9-02-93
VIEW0207.ZIP 320436 9-02-93

Directory: /hamradio/packet/tcpip/docs/

BEGIN.DOC 110255 2-07-91
FAQ-1292 75121 7-06-93
INTRONOS.ZIP 54272 7-06-93
KA9QBGN.ZIP 190366 6-08-93
KA9QNOS.NR 141577 7-06-93
KA9QNOS.PS 133704 7-06-93
NETNIX.PS 286542 7-06-93
NOSBGNLP.ZIP 57488 7-06-93
NOSBGNPS.ZIP 137021 7-06-93
RSPF22P.TXT 85164 7-06-93
TAPR92.TXT 72334 7-06-93
TAPR9600.MOD 11209 7-06-93
TDMA.TXT 12713 7-06-93
USERMAN.ZIP 112344 7-06-93

Directory: /hamradio/packet/tcpip/g1emm/

G1EMMKIT.EXE 168079 7-06-93
G1EMMKIT.ZIP 213973 7-06-93
KH113016.EXE 193643 7-06-93
KH113016.ZIP 593938 7-06-93
PCELM21.ZIP 116682 7-06-93
READ.ME 1077 7-06-93
SMALLEMM.EXE 134945 7-06-93

Directory: /hamradio/packet/tcpip/gpsnos/

GPSC1DOC.ZIP 38361 7-30-93
GPSC1EXE.ZIP 162104 7-30-93
GPSC1HLP.ZIP 13415 7-30-93
GPSC1SRC.ZIP 638737 7-30-93

Directory: /hamradio/packet/tcpip/gracilus/

GCALLBK.TXT 440 7-06-93
GCALLBK.ZIP 13914 7-06-93
GRAC20M2.ZIP 539910 7-06-93
P10DVR.TXT 824 7-06-93
P10DVR.ZIP 25230 7-06-93
P10R30E.TXT 29184 7-06-93
P10R30E.ZIP 291851 7-06-93
TWINDV21.ZIP 38656 7-06-93

Directory: /hamradio/packet/tcpip/nos/

KIT_SRC.TXT 4191 11-05-93
KIT_SRC.ZIP 39567 11-05-93
NOS-SLFP.ZIP 310211 6-08-93
NOSVIEW.ZIP 1764 7-06-93
NOSVW304.ZIP 682322 7-06-93
ROSE-NOS.ZIP 18050 7-06-93

Directory: /hamradio/packet/tcpip/nos-kit/

KIT_SRC.TXT 4191 10-27-93
KIT_SRC.ZIP 39567 10-27-93
NOS_KIT.DOC 4313 10-27-93
NOS_KIT.ZIP 659372 10-27-93

Directory: /hamradio/packet/tcpip/pa0gri/

GR-BUGS.BEE 5120 7-06-93
GR-NOTES.BEE 19584 7-06-93
GRIBEE08.ZIP 831616 7-06-93
GRNOS08.ZIP 268800 7-06-93
GRNOS08S.ZIP 257408 7-06-93
NOS_1229.DOC 172009 7-06-93
NOS_1229.EXE 203295 7-06-93
NOS_1229.MAN 221639 7-06-93
NOS_1229.MAP 75531 7-06-93
NOS_1229.ROF 168281 7-06-93
NOS_1229.VER 52 7-06-93
NOS_1229.ZIP 821866 7-06-93
RSPF0826.TXT 294 7-06-93
RSPF0826.ZIP 53695 7-06-93

Directory: /hamradio/packet/tcpip/pe1chl/

920420.DIR 6353 7-06-93
920420LT.ARC 175565 7-06-93
920420MT.ARC 111710 7-06-93

920420TC.ARC 153934 7-06-93
920420TP.ARC 104054 7-06-93
920420TS.ARC 113244 7-06-93
AUTOEXEC.DRS 2321 7-06-93
HISTORY.ARC 48620 7-06-93
NETDOC1.ARC 16485 7-06-93
NETDOC2.ARC 44672 7-06-93
PACSAT.ARC 87474 7-06-93
PB920430.ZIP 131138 7-06-93
PE1CHL.NET 417 7-06-93
README.CHL 384 7-06-93
SCCPRIN5.ARC 159020 7-06-93

Directory: /hamradio/packet/tcpip/wg7j/

JNOS107B.EXE 283045 7-06-93
JNOS107B.ZIP 987123 7-06-93
WG7JDOC.ZIP 46266 7-06-93

Directory: /hamradio/rigs/

COMPICOM.TXT 15707 3-26-93
FRGLOD10.ZIP 14451 4-01-93
HF_RIGS.TXT 4317 2-02-93
HT_INFO.TXT 10990 2-02-93
IC-12AT.REV 6682 3-26-93
IC-32AT.MOD 2715 3-26-93
IC02A.MOD 2424 3-26-93
IC02ATR.MOD 3294 3-26-93
IC28H.REV 6855 3-26-93
ICOM.C 9232 3-14-93
ICOM-110.C 9842 3-26-93
ICOMCI-V.CMD 7443 3-26-93
INFOEQPT.TXT 10063 2-02-93
KENWD930.MOD 6640 3-26-93
MNUFCTRS.TXT 5051 2-02-93
QST_REVW.TXT 41097 2-02-93
R7000.HIN 26430 3-26-93

Directory: /hamradio/satelite/

DOVE3W13.ZIP 43150 3-01-93
ELETRANS.C 2176 3-26-93
GEOSAT20.ZIP 56405 3-01-93
HAM_SAT.TXT 10967 2-02-93
ORBIT23.ARC 36852 3-01-93
PROTOCOL.1 39022 6-19-89
PROTOCOL.2 2157 6-19-89
QUICKS24.ZIP 77120 3-01-93
SATELITE.BAS 5642 3-01-93
SATELITE.HOW 18571 3-26-93
SATTAIM.ARC 1860 3-01-93

SATTRACK.INF 5017 3-26-93
SATTRACK.ZIP 34886 11-11-93
TRAK280.ZIP 346847 3-01-93
USAT92B2.ZIP 86782 3-01-93
WU120EXE.ZIP 222368 3-01-93

Directory: /hamradio/satelite/arsene/

ARSENE.TXT 1968 7-19-93
TELEM14G.ZIP 29363 7-19-93
TELEM14H.ZIP 29447 7-19-93
TELEMENG.ZIP 39938 7-19-93
TELEMFRA.ZIP 40680 7-19-93

Directory: /hamradio/sstvfax/

AUTOFAX.ARC 12452 3-01-93
FFT.COM 52096 2-02-93
FFTH.COM 53760 2-02-93
JVFAX50.ZIP 407934 3-01-93
SSTVFAX2.ZIP 28323 3-01-93
SSTVWFAX.TXT 37309 2-02-93
WEFAX.ARC 35968 3-01-93
WXRDR22.ARC 98944 3-01-93

Directory: /hamradio/swl/

FAQ_SWL.TXT 21936 2-02-93
SWL114.ZIP 302908 3-01-93
SWL_INFO.TXT 20666 2-02-93

Directory: /hamradio/technici/

TEC22.ZIP 74516 6-18-93
TECHTEST.EXE 148542 1-11-92

Directory: /hamradio/utility/

ARJ230NG.EXE 200704 6-18-93
ARJ241A.EXE 223856 8-07-93
BOOZ.ZIP 12639 6-18-93
COMP16.ZIP 16102 6-18-93
COMP430D.ZIP 20241 6-18-93
FILTER11.ARC 55936 3-01-93
INTMOD60.ARC 11902 3-01-93
JLEM.ZIP 14846 2-02-93
OHMSLAW.ARC 22197 3-01-93
PDZIP.ZIP 63473 6-18-93
PKUNZIP.EXE 23528 3-15-90
PKUNZIP2.EXE 28806 5-17-93
QEXTRACT.ZIP 43123 6-18-93
RC85PR15.ZIP 50983 3-01-93
RFTOOLS.ARC 144799 3-01-93

UNARJ230.ZIP 39074 6-18-93
UNZIP.EXE 26838 6-18-93
UNZIP41.ARC 121470 6-18-93
UNZIP41.EXE 21933 6-18-93
UUDECODE.BAS 5709 3-28-93
UUDECODE.C 5565 3-28-93
UUDECODE.DOC 519 3-28-93
UUDECODE.DBG 4658 11-21-93
UUEXE521.ZIP 32455 8-24-93
WHERITIS.ARC 30943 3-01-93
ZIP.EXE 59260 6-18-93
ZIP10EX.ZIP 158335 6-18-93
ZOO210.EXE 55721 6-18-93

Directory: /hamradio/vlf/

1750MTR.TXT 6532 2-02-93

1003. Re: TEKK Radios

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-07 02:45:12 UTC
From: fmitch@netcom.com
Message-ID: <fmitchCHn8zD.IMq@netcom.com>
Source record: 50841

tekk has a special on the little data radios until the end of the
year... call them for details... 800-521-8355...

mitch, wa4osr

--
---
fmitch@netcom.com
Felton "Mitch" Mitchell, WA4OSR in Mobile, Alabama USA
205-342-7259 home, 205-476-4100 work, 205-476-0465 FAX
co-sysop for W4IAX bbs running fbb ... sysop for WA4OSR DXCluster in Mobile..

1004. Re: MICOR on 9.6kbaud packet?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-07 07:55:18 UTC
From: arog@BIX.com
Message-ID: <arog.755250918@BIX.com>
Source record: 50843

RE: Micors for Packet...

The best Micor to use for a this would be a 35 watt model
such as a T44RTA. The heat sink (with a small fan) should
work fine for continous duty. The 70 watt T54RTA needs
real.work to keep cool in that kind of service.

Alan, w6spk
arog@BIX.com, Moderator of ham.radio

1005. S: manual for TNC commands

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-07 10:05:24 UTC
From: root@rnivh.rni.sub.org
Message-ID: <CHntD2.HAy@rnivh.rni.sub.org>
Source record: 50861

Hi,

I have built a TNC-2 kit from a German vendor with a AX.25 L2V2. It
works great although the documentation was quite bad. The manual does
not include the right command description for my software version.
So I wondered whether someone in this newsgroup could send me a manual
for my TNCs' software.

This is the startup message:

```
Tucson Amateur Packet Radio TNC-2
AX.25 Level 2 Version 2.0 + BLP 1.0
Release 1.1.8 03/20/92 - 32K RAM
Checksum $F8
cmd:
```

and this is the output on '2wxn':

```
2WXN (C) 1985-92 InfoMotion, Inc. All rights reserved.
Last mod:N2WX 03/20/92
```

BTW: What is this BLP 1.0 ?? The manual says something about PMS
(Personal Mail System) but this is not included in my software !
Is BLP something comparable to PMS ?

I hope someone could help me ...

Thanks for reading !

Bye,
Torsten.

PS: I'm not licensed yet, so you cannot reach me via packet radio.
In about a week I'll have my license test ...

--
O / ____ _ Torsten Leibold
-+-= | ____o____/_| Konrad-Adenauer-Allee 105
/ \ <[_____-----< 68519 Viernheim, Germany
| o' ...!subnet.sub.net!rnihd!rnivh!torsten

1006. Need advice on using tube-final rigs for RTTY/AFSK

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-07 11:07:29 UTC
From: stickler@klaava.Helsinki.FI
Message-ID: <2e1o5h$n77@klaava.Helsinki.FI>
Source record: 50844

I'll be shopping for a used rig soon and will be on a very tight budget, so I'm trying to get a picture of what the minimal rig would be that will do what I want. Other than SSB/CW, I've been itching to get into RTTY, but have heard that many older rigs have problems both from the 100% duty cycle and sluggish operation.

I'm intrested in hearing people's experiences working the various digital modes on HF using older tube rigs, or rigs with tube finals. More than likely, I'll be using a late-model multimode TNC and AFSK for HF RTTY/Baudot/AMTOR. What sort of things should I look for in a suitable rig. Obviously, the quality of the SSB signal is more important when using AFSK rather than FSK (right?). How can one estimate the max. drive the finals can take at 100% duty cycle? How can one determine if the tx is "fast" enough (or is sluggishness only a problem with FSK and not AFSK?).

Of course, I'd particularly appreciate any recommendations for (or against) particular rigs, which would help me in my shopping.

Thanks,

//
Patrick M. Stickler OH2LUV, KC4YYY The comments contained herein
WSOY - Information Systems Division do not necessarily reflect the
Helsinki, FINLAND (psti@wsoy.fi) official views of my employer.
//

1007. Two things...

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-07 12:56:25 UTC
From: sehrlich@lynx.dac.northeastern.edu
Message-ID: <1993Dec7.125625.24537@lynx.dac.northeastern.edu>
Source record: 50847
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc

I am in search of two items (this is a relay for a friend on packet
but doesn't have Internet):

1) A technical reference manual for the Heathkit HD4040 TNC

2) An article (he can't remember where he saw it) regarding a generic
article involving putting 330pF capacitors across DB25 connections of
a serial cable from the TNC to the computer to quiet the noise from the
TNC. This article reflected TNC2 clones in general.

If anyone can help with either of these two items, please let me know.

Thanks much.

73,
Scott

--
==
| Scott Ehrlich Internet: wy1z@neu.edu |
Amateur Radio: wy1z AX.25: wy1z@k1cf.ma.usa.na

1008. AM7910 vs i2970

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-07 13:13:39 UTC
From: postmaster@asarin.ORG.AR
Message-ID: <gate.gT07Dc1w165w@asarin.org.ar>
Source record: 50856

SINGLE - CHIP FSK MODEM WITH FILTERS: (i2970) - (AM7910)
---

* 300 bps Full Duplex Exceeds CCITT V.21 and Bell 103/113/108.

* 1200 bps Half Duplex Exceeds CCITT V.23 and Bell 202.

* 5 Pin Mode For Modem configuration.

* Auto-Answer, Lookbacks Provided.

* Pin-for-Pin compatible with AM7910.

* Complete RS232/v.24 Handshaking.

* Surpasses Military Electrostatic Discharge Specification
(MIL STD 883B Method 3015.1).

The Intel - i2970 - single-chip, 28 pin, FSK modem is pin for pin compatible
with the AM7910.

The primary applications for the i2970 are for database access, ie: Videotex,
and point-of-sale Terminals.

Other applications include industrial control/remote monitoring and telemetry.
A Data Access Arrangement (DAA) or acoustic coupler must externally provide the
phone line interface.

TOP VIEW.

1) RING (*) ������-U�����Ł
2) Vcc ₹1 28₹
3) RESET (*) ₹2 27₹
4) Vbb ₹3 ₹□ 26₹
5) RC ₹4 ₹i₹ 25₹
6) CAP1 ₹5 ₹2₹ 24₹
7) CAP2 ₹6 ₹9₹ 23₹
8) TC ₹7 ₹7₹ 22₹
9) AGND ₹8 ₹0₹ 21₹
10) TD ₹9 ₹□ 20₹
11) BRTS (*) ₹10 19₹
12) RTS (*) ₹11 18₹
13) CTS (*) ₹12 17₹
14) BCTS (*) ₹13 16₹
15) BDR ₹14 15₹
16) DTR (*) ₹₹₹₹₹₹₹₹₹₹₹₹₹₹₹₹
17) MC0

18) MC1
19) MC2 Pin Configuration.
20) MC3
21) MC4
22) DGRD
23) XTAL2
24) XTAL1/CLK
25) CD (*)
26) RD
27) BCD (*)
28) BTD

Note: (*) Logically Negated.

Symbol:	Function:
VCC	Power supply, Vin +5 Vcc. +/- 5% Ref to GNDD.
VBB	Power supply, Vin -5 Vcc. +/- 5% Ref to GNDD.
GNDA	Analog ground, not internally connected to GNDD.
GNDD	Digital ground, not internally connected to GNDA.
CAP1/CAP2	Input Capacitor for A/D converter. External Capacitor/ Resistor required for NETWORK.
XTAL1/XTAL2	Crystal inputs - Pin XTAL1 can be used with an external clock.
RESET (*)	RESET circuit input. RESET by applying a TTL logically negated signal.
TC	Output. TX data is modulated and converted to Analog for the telephone line.
RC	Input. RX data of analog modulated signal. Demodulation input.
TD	TX data. Serial data application.
RD	RX data. Serial data application.
BTD	TX data. Via the return channel.
BRD	RX data. Via the return channel.
CD (*)	Carrier detect.

BCD (*)	Carrier detect. Via the return channel.
DTR (*)	Data terminal ready.
RTS (*)	Request to send.
BRTS (*)	Request to send. Via the return channel.
CTS (*)	Clear to send.
BCTS (*)	Clear to send. Via the return channel.
RING (*)	Ring input. From DAA.
MC0-MC4	Modem control from 0 to 4. Over 32 different modes can be configured.

73's de Ed Sweet
LU7AKC @ LU7AKC.#COL.CF.ARG.SOAM
<postmaster@asarin.org.ar>

1009. Re: Misroutes to Namibia usa.na domain (was: wb7tpy gateway)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-07 13:36:13 UTC
From: david@djwhome.demon.co.uk
Message-ID: <755296573snx@djwhome.demon.co.uk>
Source record: 50873

In article <755059253snx@djwhome.demon.co.uk> david@djwhome.demon.co.uk (David Woolley) writes:
>Actually, in this particular case, there would seem to be a simple
>solution within the domain name system which could avoid this problem.
>All that needs to happen is for Namibia to add an MX record for
>*.usa.na, pointing to a North American Internet to Packet gateway, or a
>bit bucket (but the IP address must be good so that mailers don't try to
>fall back to the *.na address). With the former, as I understand it,
>inbound mail needs human vetting, so a warning can be sent to the
>originator and the mail optionally forwarded into the Packet network.
>Alternatively, the gateway could just bounce it with an appropriate
>message.

I'm afraid the official line on this is that because usa.na is reserved
for Namibia, amateur radio is trespassing and should effect the cure
within itself.

By the way, the original suggestion was not that this should be an approved
way of addressing mail to the US packet network, but rather that it should
be a way to ensure that the packet network gateway operators could catch
people using bad addresses and inform them of their bad ways without
involving people outside the amateur radio community.

I have assumed that the gateways generate valid, replyable addresses in
their Internet mail headers (RFC 822).
--
David Woolley, London, England david@djwhome.demon.co.uk

1010. Re: Need advice on using tube-final rigs for RTTY/AFSK

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-07 14:53:28 UTC
From: jms@col.hp.com
Message-ID: <2e25d9$cgg@hp-col.col.hp.com>
Source record: 50852

Patric M Stickler (stickler@klaava.Helsinki.FI) wrote:
: I'll be shopping for a used rig soon and will be on a very tight
: budget, so I'm trying to get a picture of what the minimal rig would be
: that will do what I want. Other than SSB/CW, I've been itching to get
: into RTTY, but have heard that many older rigs have problems both from
: the 100% duty cycle and sluggish operation.

: I'm intrested in hearing people's experiences working the various
: digital modes on HF using older tube rigs, or rigs with tube finals.
: More than likely, I'll be using a late-model multimode TNC and AFSK for
: HF RTTY/Baudot/AMTOR. What sort of things should I look for in a
: suitable rig. Obviously, the quality of the SSB signal is more
: important when using AFSK rather than FSK (right?). How can one
: estimate the max. drive the finals can take at 100% duty cycle? How
: can one determine if the tx is "fast" enough (or is sluggishness
: only a problem with FSK and not AFSK?).

If it has relay switching from xmit to receive, it's probably not fast
enough for Amtor. If your transmitter has real transmitting tubes for
finals, e.g. 6146 or something like that, it will probably handle 100%
duty cycle. If it has TV horizontal sweep tubes for finals, I'd
not run more than 50% of the rated PEP output power, and carefully
then. One of the best investments you can make if you're going to use
a tube type transmitter is a small muffin fan. I put weather stripping,
the kind that comes in a roll, on the bottom of the fan, a guard on top,
and simply lay the fan on top of the transmitter, over the final
compartment and pull air from the bottom, through the final compartment,
and out the top. Really prolongs the life of the tubes.

I've always used separate transmitter and receiver, with an 'electronic
T/R switch'. Of course, it takes a good receiver to not overload
when transmitting. I use a Drake R-4B receiver, and either a Drake T-4XB
or Heath HX-1681 for transmitting. The only problem I've had is keeping
the xmtr and rcvr drifting together while working digital modes. I do
this by watching the monitor scope and slowly moving the xmtr to match
what the received signal is doing. A bit of trouble, but it works.
Oh, I use only FSK with the tube rigs. Added it to the VFO circuits on
both transmitters.

Mike, K0TER

: Of course, I'd particularly appreciate any recommendations for (or
: against) particular rigs, which would help me in my shopping.

: Thanks,

```
: ////////////////////////////////////////////////////////////////////////
: Patrick M. Stickler OH2LUV, KC4YYY The comments contained herein
: WSOY - Information Systems Division do not necessarily reflect the
: Helsinki, FINLAND (psti@wsoy.fi) official views of my employer.
: ////////////////////////////////////////////////////////////////////////
```

1011. Re: When will we get digital cellular?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-07 15:25:02 UTC
From: pas@jupitercmc.ca
Message-ID: <1993Dec7.152502.22834@venus.ic.cmc.ca>
Source record: 50845
Cross-posted to: alt.radio.scanner,rec.radio.scanner,rec.radio.amateur.digital.misc

In article <1993Dec6.174733.27968@mixcom.mixcom.com>, kevin.jessup
<kevin.jessup@mixcom.mixcom.com> writes:
|>
|> I don't know where to post this, so I'll give this group a try.

stuff deleted

|> If the digital stuff will not be around for 3 or 4 years I can understand
|> the investment in analog. But if digital cellular will be available in
|> a year or two, I'd rather not spend the money.
|>
|> So should I buy an "analog" celluar phone or not? Any opinions?
|> Thanks.

IMHO, analog will be around and supported for another
decade. Digital cellular is still being developed, tested
and politically tossed about. Over time, the end user
cost of digital will drop to become an attractive option.
The curves might meet in a few years, maybe more. If your
objective is to make phone calls, buy an analog phone now.
If your objective is to play with new technology, wait a
year or two or whatever it takes for it to arrive in your
city and buy a digital phone. Expect limited coverage and
additional expense with the latter option.

Peter

Peter A. Stokes _____ Voice & Voice mail: (613) 545-2923
Engineering Applications Support _____ FAX: (613) 548-8104
Canadian Microelectronics Corporation _____ Net: stokes@cmc.ca
Kingston, Ontario, CANADA _____ Radio: VE3ZXT

1012. RE: Digital with Sound Blaster???

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-07 15:41:48 UTC
From: cnc23a@b4pph13e.bnr.ca
Message-ID: <1993Dec7.154148.5968@nrtpa038.bnr.ca>
Source record: 50855

In your previous article, you wrote:

> Can someone please tell me if there is any software that uses a Sound
> Blaster to receive CW,RTTY,SSTV,PACKET,etc,etc.
>
> Thanks, 73,
> --
> Scott R. Weis KB2EAR
> Internet: kb2ear@kb2ear.ampr.org
> Snail Mail: 10 Palmer Rd., Kendall Park, NJ, 08824-1228
> Phone: +1 908 297 0469

I'm sorry for not e-mailing, but my mail sys is funny.

For CW : FFTMORSE by Francois Jalbert (jalbert@IRO.UMontreal.CA)

For SSTV: SLOWSC by Gene Harlan WB9MMM

For DTMF: _DMTF by Peter Jennings VE3SUN

I found these on my SIMTEL CD,

a local ham has developed a RTTY program, but has not generally released it.

PACKET ????

Hope this is of some help.

73s es CUL N4ZBB

--
==========

Ken M. Edwards, PE Bell Northern Research, Research Triangle Park, NC
(919) 481-8476 email: cnc23a@bnr.ca Ham: N4ZBB

All opinions are my own and do not necessarily reflect the views of
my employer or co-workers, family, friends, congress, or president.

(To the e-mail'r out there -> This is a short as it will gets)

1013. X1J at 38.4 kbps

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-07 15:49:16 UTC
From: glenne@sad.hp.com
Message-ID: <CHo9A4.8v4@srgenprp.sr.hp.com>
Source record: 50848

A little while back I asked about the potential for running X1J at higher (than usual) speeds. I was looking to find an inexpensive temporary solution to allow running some of my 256 kbps 904 MHz radios at remote, high level sites as part of a fledgling backbone here in Northern California while the high performance digital controllers are having software problems worked out. I got some useful responses which indicated that there might be hope at least through 19.2 kbps.

Since then I have experimented with X1J running in PacComm Tiny2 TNCs with 10 MHz clock and parts. This note is to report that it works but not well.

After running a couple of X1Js in the garage for several days to verify that things worked one was put on a remote hilltop about 25 miles away. It was connected to a co-located IP host and routing and ARP was adjusted accordingly. At the start, the node answered pings flawlessly. Round trip time for either the remote or local nodes was on the order of 300 ms. The stats command allowed remote monitoring of performance. I really enjoyed the remote diagnostic capability of X1J.

Everything looked fine for a little while. Then I started seeing transmit underruns reported. In retrospect, I think this happened when the node was particularly busy like after being connected back and forth several times for "excercise". By the 2nd day there was a severe keyup delay and horrendous underruns. I suspect that the CPU was somehow thrashing and not able to keep the transmit buffer full. The loop counter and buffers did not show any difficulty. At 10 MHz the loop counter runs about 1300 when things are idle. A warm reset had no apparant improvement. After another few hours the node stopped transmitting entirely. That is the current situation until someone can get back up to the hilltop.

At this point I'm back to seeking getting a version of TNC2 KISS with digipeat capability added in to allow a fast and cheap solution to the original problem. Mike, K3MC, the original author of TNC2 KISS, hopes to be able to help. Running simple KISS is not desirable since it requires the data to make two trips on the wire connection to a local host (also required). Digipeat strings (source routing) is not elegant but it is far and away the highest performance solution in a cpu limited environment like the TNC2. With two intermediate digipeaters, all TNCs running TxDelay of 0 with TXDIDDLE enabled for two characters worth of edges (16 edges to prime the RxClock recovery machine at the other end), a 256 byte packet goes end to end and an ACK can come back in about 500 milliseconds. This represents only a modest overhead incurred by the Z80's limited capability and an effective rate almost that of the raw

channel rate.

Hopefully, the addition of digipeating will not add too much overhead relative to straight KISS mode. The GRAPES group reports using KISS at 56K on the radio side with 5 MHz TNC2s. Perhaps at least 76.8 kbps will be possible with the digipeat feature added in on 10 MHz boxes.

I'd be interested to hear from anyone else trying to eek higher speeds from conventional TNC2s.

Glenn Elmore n6gn

ax.25 n6gn@wx3k.#nocal.ca.usa.na
amateur IP: glenn@SantaRosa.ampr.org
Internet: glenne@sr.hp.com

1014. Re: Need advice on using tube-final rigs for RTTY/AFSK

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-07 15:53:49 UTC
From: stephens@geod.emr.ca
Message-ID: <stephens.755279629@ngis>
Source record: 50846

stickler@klaava.Helsinki.FI (Patric M Stickler) writes:

>I'll be shopping for a used rig soon and will be on a very tight
>budget, so I'm trying to get a picture of what the minimal rig would be
>that will do what I want. Other than SSB/CW, I've been itching to get
>into RTTY, but have heard that many older rigs have problems both from
>the 100% duty cycle and sluggish operation.

>I'm intrested in hearing people's experiences working the various
>digital modes on HF using older tube rigs, or rigs with tube finals.
>More than likely, I'll be using a late-model multimode TNC and AFSK for
>HF RTTY/Baudot/AMTOR. What sort of things should I look for in a
>suitable rig. Obviously, the quality of the SSB signal is more
>important when using AFSK rather than FSK (right?). How can one
>estimate the max. drive the finals can take at 100% duty cycle? How
>can one determine if the tx is "fast" enough (or is sluggishness
>only a problem with FSK and not AFSK?).

>Of course, I'd particularly appreciate any recommendations for (or
>against) particular rigs, which would help me in my shopping.

>Thanks,

I have used an FT101B on RTTY, and Amtor with a KAM. It works, but
keep the oput power to 50% rating as if it were on AM. The Kam input
filter is a bit wide for RTTY and Amtor, but it will work, and on amtor
interference just slows things down a bit. FT101's are rugged and reliable,
and can be fixed at home, and these days are cheap, but still hold their own.
The VFO on the early models B does drift in the first hour or so, and dont
pile stuff on to p of the rig or the drift will not settle down. An external
VFO overcomes this probelm. The final tu bes are sweep tubes and may be hard to
find.
VE3PYG

--
Dave Stephenson
Geological Survey of Canada
Ottawa, Ontario, Canada *Om Mani Padme Hum 1-2-3*
Internet: stephens@geod.emr.ca

1015. Re: When will we get digital cellular?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-07 16:23:56 UTC
From: enge@enge.almaden.ibm.com
Message-ID: <2e2ams$lvg@juniper.almaden.ibm.com>
Source record: 50849
Cross-posted to: alt.radio.scanner,rec.radio.scanner,rec.radio.amateur.digital.misc

Digital cellular is now being advertised as available here in the San Francisco Bay Area.

Roy Engehausen
enge@almaden.ibm.com

1016. help

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-07 17:31:43 UTC
From: nld@uipmzb.PHysik.uni-mainz.DE
Message-ID: <9312071731.AA28018@uipmzb.physik.uni-mainz.de>
Source record: 50863

[No readable article body recovered]

1017. W9GR DSP article of Sept 1992 QST

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-07 18:45:51 UTC
From: nat@kpc.com
Message-ID: <1993Dec7.184551.24853@kpc.com>
Source record: 50851

Hi,
I just stumbled across W9GR's article and am itching to build it.
I have several questions:
1. is the PC board available. I can get hold of the parts locally.
2. The article mentions that the TI assembly files for the prom code
are available on compuserve. Are they also available at some internet ftp site.
Any pointers would be helpful.
3. The article also mentions that the prom programming files are
also available. Again pointers would be helpful.

Thanks in advance.
Nat.

--

Natarajan Gurumoorthy AB6SJ Kubota Pacific Computer, Inc.
nat@kpc.com 2630 Walsh Avenue
Phone 408 987 3341 Santa Clara, California 95051.

1018. Re: When will we get digital cellular?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-07 19:21:01 UTC
From: henniger@Metaphor.COM
Message-ID: <3509@cronos.metaphor.com>
Source record: 50850
Cross-posted to: alt.radio.scanner,rec.radio.scanner,rec.radio.amateur.digital.misc

```
In article <2e2ams$lvg@juniper.almaden.ibm.com>, enge@enge.almaden.ibm.com writes:
|> Digital cellular is now being advertised as available here in the San
|> Francisco Bay Area.
|>
|> Roy Engehausen
|> enge@almaden.ibm.com

I heard a rumor that digital cellular is limited to a small area in downtown
San Jose. Can anyone confirm/deny?

Mick

--
---------------------------------
| Mick henniger@metaphor.com |
| (wb5von) |
---------------------------------
```

1019. Spread_Spectrum

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-07 19:21:13 UTC
From: keithhar@eb5ts4.EBay.Sun.COM
Message-ID: <2e2l39$34o@male.EBay.Sun.COM>
Source record: 50858
Cross-posted to: rec.ham-radio,rec.ham-radio.misc,rec.ham-radio.packet,rec.radio.amateur.packet,rec.radio.amateur.digital.misc

After my post for info on Spread Spectrum this
is a summery of the info I got. So anyone else who wants to
play with SS can.
I had many request for the info I might get, so I think it would be
nice to put it here.

Thanks to all who sent me info.

A group meet in Redwood City on the second Wednesday of the month.
contact
--
.---+--------------------------.
INTERNET: pineapp@netcom.com	Daniel Curry WB6STW
AMPRNET : dan@wb6stw.ampr.org [44.4.20.144]	E-:-) Ham Radio Operator
AX.25 : wb6stw@n0ary.#NOCAL.CA.USA.NA	Redwood City, CA USA
'---+--------------------------'

You might consider subscribing to "Spread Spectrum Scene" published
by Randy Roberts, KC6YJY. You can get hold of him at 415-726-6235.
Tell him "Steve" sent you ;-)

Steve KA6S

I'm also interested in spread spectrum applications, primarily for data
communications. One place to look for information is the ARRL Spread Spectrum
Sourcebook. It has construction projects as well as a lot of information
on the technology and capability of SS systems. It also covers the legal
aspects of SS operation.

I'm thinking of coming up with an SS data transmission scheme that would
use the entire bandwidth of an OSCAR transponder -- at a power level just
above the noise floor -- for a 56kb data link.

If either of you gets more information, add me to your list of interested
parties.

Thanks,
-- Bruce Toback
KN6MN

See Electronics World + Wireless World "Voice link over spread
spectrum radio" by James Vincent G1PVZ. This series began in Sep 93
issue describing a complete Direct Sequence system from microphone to
the antenna (435 MHz) and from the antenna to the loudspeaker.

The classical reference is "Spread Spectrum Systems" by Robert C Dixon,
ISBN 0-471-88309-3 (2nd edition 1984). This book is quite readable
compared to many other scientific books.

Paul OH3LWR

In a previous post, Marc Lombart (ranfry@CAM.ORG) wrote:
: My knowledge of Spread Spectrum is quite limited, but my
: understanding is that it would probably not be viable as a HAM node,
: seeing as it takes many times the normal bandwidth for each "channel."
: The main use of Spread Spectrum is security, not communication. At
: least, that is what I know from the little I have found on the subject.

Security depends on the algorithm you use to "spread" the signal, so
you can make it pretty public if you want to. (I think current FCC
rules limit ham useage to a few well-known algorithms.)

As far as my limited understanding goes, the main advantage is
coordination: a set of well-coordinated and efficiently-used
conventional channels are more efficient of spectrum space than spread
spectrum, but you can throw a bunch of spread-spectrum users into a
band with *no* coordination and do almost as well. It really pays off
when users start moving around or coming and going with no warning.
That makes it ideal for consumer applications, the advantages for hams
are less clear.

The ARRL publishes a book on the subject that is supposed to be a
pretty good intro.
--
Eric Williams | Vincent: MC (B+S)t G+Y 1.1 Y L++ C+ T+ I+++ H+ S++ V+ F++
wd6cmu@netcom.com | Murphy: DS W+(B+R)t+R Y 1.2 Y L C+ T- I+++ H+ A+ F+ B--
WD6CMU@WD6CMU.#NOCAL.CA.USA.NA

You might try sending calling TAPR (don't have their address handy). I
think they were experimenting with some 900MHz spread spectrum packet
stuff in Southern California... some sort of wide area high speed net,
I believe.

Ken Friberg
friberg@mtu.edu
n8pbe@w8yy.#upmi.mi.na

Hi, there are a number of ways to genarate PN codes. One way is to just
write a program that generates random numbers each between 0 and 1 (or -1 and 1)
However this does not satisfy some of the conditions that the PN seqs must meet in a
(rather) realistic environment.

So another way is to use m-sequences, which have well-defined correlation
properties. But the problem here is that you can only genarate that many
different seqs for a specific number of shift registers. In other words the
more m-seqs you want the more (hardware or) software you have to write to generate them.
Finally another way, is to use Gold sequences, which basically is a combination
of m-seqs. With this method you can generate even more PN seqs with only a few
additional lines of code. All of the above has been implemented before, and I amsure you'll

find a lot of material.

If you need more information, about books, papers (on Spread Spectrum) and even the code let me know.

regards

-stavros

>To answer Keith's question, get a copy of the ARRL _Spead Spectrum
>Sourcebook_ for the basic outlines of the various types of SS, what
>PN codes are permitted, and the types of equipment modifications needed
>to operate SS. You can convert an IC4AT to a 70 cm hopper, and there
>are plans for building PN spreaders using common off the shelf parts.
>Outfits like Qualcomm have chipsets for complete systems, but if you're
>learning and experimenting, it's probably better to build your first
>units with simple TTL blocks so you'll understand what's happening.

There are other references kicking around, and for a completely up-to-date one, see if you can track down the September and October 1993 issues of _Electronics & Wireless World_. The September issue has a very good overview of spread spectrum (concentrating on direct sequence), and the October issue has construction information on a 435 MHz direct sequence spread spectrum system. The articles were written by James Vincent, G1PVZ.

In typical spread spectrum fashion the transmitter is (relatively) simple, while the receiver is quite complicated. It uses some very interesting techniques for acquiring and keeping correlation, and does not need an external reference like some of the stuff in the ARRL spread spectrum book...

Just in case, no, I have no connection with E&WW, or with Reed Business Publishing. I have no idea who Mr. Vincent is, though I do like his style.

73 from Burnaby
laura VE7LDH

I recall seeing "the Spread Spectrum Sourcebook" as part of an ARRL literature ad in a recent QST. I am aware of at least one newsletter devoted to this, and I seem to recall that there is a recent commercially-available amateur product that is a Spread Spectrum modem/radio. Sounded neat - think the creator was in AZ, but could be wrong.

Me? I haven't seen/done spread spectrum since I was a satellite jock in the USAF back in the seventies...

Neat stuff, though.

svh

--
Steven V. Hovater (703)318-5839
Senior CASE Engineer Verdix Corporation

EMAIL: svh@verdix.com Amateur Radio: AA5YH

1020. RE: Digital w/ SB - use hamcom for rtty

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-07 19:30:05 UTC
From: henniger@Metaphor.COM
Message-ID: <3510@cronos.metaphor.com>
Source record: 50854

In article <1993Dec7.154148.5968@nrtpa038.bnr.ca>, cnc23a@b4pph13e.bnr.ca (Ken Edwards) writes:

|>
|> In your previous article, you wrote:
|>
|> > Can someone please tell me if there is any software that uses a Sound
|> > Blaster to receive CW,RTTY,SSTV,PACKET,etc,etc.
|> >

for rtty use hamcom22.zip

--

| Mick henniger@metaphor.com |
| (wb5von) |

1021. Re: ATM on Amateur Radio?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-07 19:42:59 UTC
From: paulf@Csli.Stanford.EDU
Message-ID: <1993Dec7.194259.5043@Csli.Stanford.EDU>
Source record: 50857

willmore@iastate.edu (David Willmore) writes:

>From my understanding of ATM when I studied it in a networking class, the
>reason that the frame size was so small was to make the switching nodes
>simpler in that they didn't need large buffers of variable size. Statistics
>from the ATM research show that queues stay small because of this.

Not even that. To get low loss rates (comparable with uncoded fiber), you need substantial output buffers, even for uncorrelated traffic. When you throw in "high bandwidth" applications, which have large transaction volumes, the output buffering requirement goes through the roof (at least 200 MB per line).

ATM might work with the sorts of low bandwidth applications that we currently run on amateur radio channels. But we pay heavily for our bits, and losing 17% to overhead (before the encapsulation overhead) is silly.

--
-=Paul Flaherty, N9FZX | "Fighter pilots make movies. Bomber pilots make
->paulf@Stanford.EDU | history." -- Jake Grafton

1022. amatuer radio

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-07 22:03:18 UTC
From: z_addicksda@ccsvax.sfasu.edu
Message-ID: <1993Dec7.160318.8345@ccsvax.sfasu.edu>
Source record: 50853

I would just like to say that I think amatuer radio is the greatest
thing in the world. It is

1023. Re: Digital with Sound Blaster???

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-07 22:17:49 UTC
From: david@djwhome.demon.co.uk
Message-ID: <755327869snx@djwhome.demon.co.uk>
Source record: 50872

In article <2dqrv3$9ot@kb2ear.ampr.org> you write:

I have had to cancel your Followup-To: poster, so that I can legally reply (actually, I might be able to legally reply, but a lot of people wouldn't, and I don't want to read the small print of part 97 and the UK licence. The difficult part of doing this is the receive side, so SWLs may well have the answer.)

>
>Can someone please tell me if there is any software that uses a Sound
>Blaster to receive CW,RTTY,SSTV,PACKET,etc,etc.
^^ ????
CW: oak.oakland.edu (or other Simtel mirrors):/pub/msdos/hamradio

FFTMORSE.ZIP B 27344 920515 Hams: Sound-Blaster FFT Morse code decoder

This does not work for the SB Pro. I have a fix, which works for me, but reportedly failed for someone else and the other to whom I gave it have not reported back. I also have a half completed project to produce a much better version under the MS-DOS port of the Gnu compiler. (The current version only really works on clean signals.

Someone apparently adapted FFTMORSE to act as a touch tone decoder.
--
David Woolley, London, England david@djwhome.demon.co.uk

1024. NETMGR a tool for R.O.S.E.

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-08 03:45:42 UTC
From: kb2ear@kb2ear.ampr.org
Message-ID: <2e3il6$ad8@kb2ear.ampr.org>
Source record: 50870
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc

Bill Slack NX2P asked me to post this.

NETMGR is a Windows based ROSE network managment took. It
allows the ROSE network manager or switchOP to graphically
draw the network (or part of the network) and automatically
generate the configuration files. In most cases no manual
editing of the configuration files will be neccessary.

If you would like a copy and don't have FTP please send me email and I
send a copy via email. Or I'll post somewhere on USENET.

What FTP sites should I post this on?

If you would like more info about ROSE send email to
askrat@kb2ear.ampr.org and/or get on the ROSE mailing list. To get on
the mailing list send email to listserv@kb2ear.ampr.org with this line
as the body:

ADD rose

or

ADD <Your_Address> rose

To post to the list send email to rose@kb2ear.ampr.org.

73,
--
Scott R. Weis KB2EAR
Internet: kb2ear@kb2ear.ampr.org
Snail Mail: 10 Palmer Rd., Kendall Park, NJ, 08824-1228
Phone: +1 908 297 0469

1025. Re: When will we get digital cellular?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-08 04:23:25 UTC
From: jlwei@ArtSci.WuStL.EDU
Message-ID: <2e3krt$i72@wuecl.wustl.edu>
Source record: 50859
Cross-posted to: alt.radio.scanner,rec.radio.scanner,rec.radio.amateur.digital.misc

: I don't know where to post this, so I'll give this group a try.

: I have been unable to get my wife to try for her technician class
: amateur radio licence. So, in the interest of some added security
: while she and my 4-year-old son are in the car, I am considering the
: purchase of a cellular phone.

: I know that the current system is FDMA (frequency division multiple
: access) or "analog" cellular and is easily monitored. When will
: digital cellular become the norm? I've heard that 1994 is the
: introductory time frame for initial tests.

. .

: If the digital stuff will not be around for 3 or 4 years I can understand
: the investment in analog. But if digital cellular will be available in
: a year or two, I'd rather not spend the money.

: So should I buy an "analog" celluar phone or not? Any opinions?
: Thanks.

Well, I really don't know too much about it--I can barely keep up with
my classes, not to mention the pace of technology. BUT I did see an ad
in the paper (unless I was dreaming) of SWB starting a digital network.
Supposedly, it also has analog capability for areas not covered by Bell.
I can't say for sure anything about it--I just remember it because that's
about when I started reading this newsgroup and when I first read the threads
about cell phones, freqs, mods, etc.

Anybody else seen these ads? I'm in St. Louis and read it in the
Post-Dispatch. A two-page ad, I believe.

--j

1026. Re: When will we get digital cellular?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-08 07:29:46 UTC
From: guyer@spock.usc.edu
Message-ID: <2e3vpa$dg9@spock.usc.edu>
Source record: 50875
Cross-posted to: alt.radio.scanner,rec.radio.scanner,rec.radio.amateur.digital.misc

Digital Cellular is definately on the way and many companies are investing in it. In fact, I work for a small company helping to create a digital market. GE Ericson and Motorolla both already have digital systems they are maketing to potential digital cellular companies. Fleetcall (Nextel) and AT&T are both investing millions in digital cellular. Los Angeles should have a system any time now. Las Vegas is in the works as well as Minneapolis/St. Paul. Interestingly, these frequencies used will also be on the SMR (Specialized Mobile Radio) frequencies used for dispatching. That puts them in the 150Mhz band. The benefits will include clearer communicatoins as well as higher data rates for modems. In addition, due to digital signal compression, kind of pkzipping your conversation, each frequency will be able to handle from 6 to 15 users, significantly increasing the capacity of the airwaves. This will reduce the cost of Digital Cellular. There are some companies offering digital/analog phones, capable of operating on both systems, but they run upwards of $500 and are hard to find. For now, since the biggest cost of cellular is the monthly service fees, get a $100-$200 phone and wait for digital cellular to get started, we are just on the crest of a hughe wave!

I hope I haven't bored any one !

--

An unknown Aerodynamicist once said:
Anything will fly,
They just have different glideslopes!

1027. Q: G3RUH 9600B modem and Kenwood TM721

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-08 11:47:22 UTC
From: yosi@genius.tau.ac.il
Message-ID: <1993Dec8.114722.24703@aristo.tau.ac.il>
Source record: 50860

I am looking for info about connecting a G3RUH 9600 modem to a KEnwood TM721.

Thanks in advance,

Yossi Sharon, 4X1BQ

Internet: yosi@eng.tau.ac.il
Packet: 4X1BQ@4X1RU.isr.mdle

1028. Re: W9GR DSP article of Sept 1992 QST

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-08 12:08:47 UTC
From: wvanhorn@magnus.acs.ohio-state.edu
Message-ID: <2e4g4f$ahl@charm.magnus.acs.ohio-state.edu>
Source record: 50862

> I just stumbled across W9GR's article and am itching to build it.
>I have several questions:

Nat -

You can ask Dave Herschberger, himself. His Internet address is:
dlh@gvgdsd.tek.com

There were many hundreds, perhaps thousands, of his kits built. Now
there is an improved version being built commercially. See QST ads.

I love mine. I use it on cw, SSB, and AMTOR/PACTOR. It makes a
big improvement on all modes.

73, Van - W8UOF
wvanhorn@magnus.acs.ohio-state.edu

1029. Re: Need advice on using tube-final rigs for RTTY/AFSK

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-08 14:19:15 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1993Dec8.141915.7164@ke4zv.atl.ga.us>
Source record: 50864

In article <2e1o5h$n77@klaava.Helsinki.FI> stickler@klaava.Helsinki.FI (Patric M Stickler) writes:
>I'll be shopping for a used rig soon and will be on a very tight
>budget, so I'm trying to get a picture of what the minimal rig would be
>that will do what I want. Other than SSB/CW, I've been itching to get
>into RTTY, but have heard that many older rigs have problems both from
>the 100% duty cycle and sluggish operation.
>
>I'm intrested in hearing people's experiences working the various
>digital modes on HF using older tube rigs, or rigs with tube finals.
>More than likely, I'll be using a late-model multimode TNC and AFSK for
>HF RTTY/Baudot/AMTOR. What sort of things should I look for in a
>suitable rig. Obviously, the quality of the SSB signal is more
>important when using AFSK rather than FSK (right?). How can one
>estimate the max. drive the finals can take at 100% duty cycle? How
>can one determine if the tx is "fast" enough (or is sluggishness
>only a problem with FSK and not AFSK?).

Ok, I use two different rigs for the HF digital modes. I use the IC735 and a B&W6100 and Drake R4C. The former is, of course, a modern solid state transceiver. It performs well on all the digital modes. It has IF shift that allows the narrow filter to be positioned correctly for the digital tones even in SSB mode. It will allow either AFSK or FSK transmission. FSK is generally preferred. It switches quickly enough for AMTOR. For RTTY, drive should be reduced to 50 watts output. For AMTOR and packet, full power is OK since it has an excellent thermal design.

The B&W6100 uses a pair of 6146Bs in the final and is rated at 180 watts PEP in SSB mode. It too needs to be throttled back to 50 watts for RTTY, and can handle about 120 watts AMTOR or packet. When I used the Drake T4X, it was necessary to throttle back the sweep tube finals to about 20 watts for RTTY because their dissipation is insufficient for higher power steady carrier use. In general, use the manufacturer's recomendation for AM voice power level for RTTY. If you don't have the manual, divide normal *average* SSB power levels by 2 for real transmitting tubes, and by 4 for sweep tubes. Average power under SSB is very difficult to characterize because it's fundamentally tied to voice characteristics. A good rule of thumb is that it's 20% of the *input* PEP rating. AMTOR and packet, because they transmit intermittantly, can use somewhat higher power levels.

Radios that use open frame TR relays can be a problem for AMTOR, but not always. Often it is the AF stage recovery time that dominates the TR turnaround. Open frame relays can be fast enough, and vacuum

relays always are fast enough. In rigs that switch the B+ to the receiver, you may need to change the value of power supply decoupling capacitors in order to get a short enough time constant for receiver recovery. Or, you can modify the TR switching so that B+ stays hot and mute the receiver another way. That's the method I normally use.

Don't be concerned about the apparent low power levels on RTTY. It doesn't take a lot of power to get good print at intercontinental distances providing the other station has a good TU, not a PK232 or KAM. Something like an ST-6 does wonders for digging out signals that are below the noise to the ear. The PK232 will allow you to put an external modem ahead of it, so using a ST-6 with it is an option. I don't think the KAM will support that without modifications. And of course for RTTY all you need is the ST-6 and a modem program that supports Baudot running on your computer, or an honest to God old mechanical teletype. The ST-6 will also work with some of the packet programs that do the bit banging in software. I don't know of any software only AMTOR programs so you're stuck with using the PK-232 as the protocol engine in that case. Some of the newer DSP boxes may be as good, or better, than the ST-6, but I haven't done a side by side test yet.

Gary
--
Gary Coffman KE4ZV | I kill you, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | You kill me, | uunet!rsiatl!ke4zv!gary
534 Shannon Way | We're the Manson Family | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -sorry Barney |

1030. Re: When will we get digital cellular?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-08 15:10:55 UTC
From: jschulma@uiuc.edu
Message-ID: <jschulma.21.000F2EAC@uiuc.edu>
Source record: 50804
Cross-posted to: alt.radio.scanner,rec.radio.scanner,rec.radio.amateur.digital.misc

In article <2e3vpa$dg9@spock.usc.edu> guyer@spock.usc.edu (David Guyer) writes:

>Digital Cellular is definately on the way and many companies are investing in
>it. In fact, I work for a small company helping to create a digital market.
>GE Ericson and Motorolla both already have digital systems they are maketing
>to potential digital cellular companies. Fleetcall (Nextel) and AT&T are
Well, currently in the Chicagoland area we have moved to the full
implementation of digital cellular (analog is still available).

Speaking as someone who has been testing digital for a few months for
Motorolla, it is not what it is cracked up to be. Don't get me wrong, in a
few years digital cellular will be what analog is today. But, right now,
digital sounds terrible! It sounds like you are talking into a cheap computer
and listening to the playback. Besides heavy hissing and other background
noice, your voice alone makes it difficult for others to understand you. On
the cellular phone end, the reception is much better. It never breaks up as
analog does every once in awhile.

To anyone considering digital:

Wait. It will get much better in the future.

Jay
--
Jay S. Schulman
Email: jschulma@uiuc.edu
NeXTMail: jschulma@sumter.cso.uiuc.edu
SLIP: schlub.slip.uiuc.edu

1031. Understanding AX.25 Packet monitored frames

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-08 16:25:28 UTC
From: postmaster@asarin.ORG.AR
Message-ID: <gate.6cD0Dc1w165w@asarin.org.ar>
Source record: 50874

UNDERSTANDING MONITORED PACKET FRAMES

Don Rotolo N2IRZ

Have you ever monitored the packet channel and wondered just what all those letters and numbers at the beginning of each packet "frame" mean ? Well, wonder no more ! This article will explain the basics of packet control.

All packet HDLC (High-level Data Link Control) frames are similar, consisting of 6 unique "fields":

| Flag | Address | Control | PID & Data | FCS | Flag |

FLAG : The Flag fields are put at the beginning and end of each frame to indicate the boundaries of the frame. A unique bit sequence is used (01111110) so other parts of the frame won't be mistaken for a Flag.

ADDRESS: This field normally specifies the destination of the frame. This is the actual call signs of the source, destination, and any digipeaters.

CONTROL: This field identifies the frame type. See FRAME TYPES below.

PID: The first byte of the Data field is the Protocol ID, specifying the type of protocol in use.

DATA: This is the actual data to be transferred. Many frames do not have a data field.

FCS: Frame Check Sequence, this is how errors are detected in a frame. Your TNC creates a number based on the rest of the fields, using a special mathematical formula. The other TNC does the same, and if the numbers match, the frame has no errors and is accepted.

We will examine a typical frame:

KD6TH-4>N2DSY-2*>N2IRZ [I;3,1]:0042z, 838 msgs, #40407 last @KD6TH-4 Mailbox>
<----Address---------> <-----> <----------Data----------------------------->
Control

Note that you do not see the Flag, PID and FCS fields.

FRAME TYPES:

C Connect frame. Also known as a 'SABM' frame (Set Asynchronous Balanced Mode).
D Disconnect frame.
DM Disconnect Mode frame.
I Information frame.
UA Unnumbered Acknowledgement frame.

UI Unnumbered Information frame.
RR Receive Ready command and response.
RJ ReJect frame.
RNR Receive Not Ready command and response.
FRMR FRaMe Reject response.
DM Disconnected Mode response.

When you type into your TNC a connect command, the TNC generates a frame like:

N2IRZ*>KD6TH-4 [C,P]

This means that N2IRZ is trying to connect to KD6TH-4. The * shows who is transmitting. The > shows the direction the frame is going (to KD6TH-4). The "C" indicates that it is a Connect frame, and the "P" means that the "Poll" bit is set. When the Poll bit is set, it means the originating station is Polling (or "searching") for the destination station (sort of asking "are you there ??"). If the destination station was to respond, it would send an "F", or Final, bit in response ("yep, I'm here"). If the radio path is "perfect", the Poll/Final bits will rarely be used again.

KD6TH-4 is able to establish a connection to N2IRZ, so it sends:

KD6TH-4*>N2IRZ [UA,F]

This means that KD6TH-4 has acknowledged receiving N2IRZ's Connect request, and confirms the connection. Your TNC generates the familiar "*** Connected to ..." message for you. KD6TH-4 now sends a greeting (his "Connect Text"):

KD6TH-4*>N2IRZ [I,P;0,0]:Hi Don, Welcome to KD6TH-4 BBS !

The "I" tells us that this is an information frame. The information (Hi Don...) can be any text. P is for Polling - KD6TH-4 is just making sure N2IRZ is still there. What is interesting here are the numbers in the "[I,P;0,0]:" part: The first number is the next frame number that KD6TH-4 expects from N2IRZ, and the second number is the number of the frame that is being sent. The order of the numbers switches when N2IRZ is sending. Upon receiving this frame without errors, N2IRZ sends:

N2IRZ*>KD6TH-4 [RR,F;1]

Telling KD6TH-4 that N2IRZ got frame 0 OK and is ready to receive frame 1. KD6TH-4 sends 2 more info frames to N2IRZ:

KD6TH-4*>N2IRZ [I;0,1]:*** You have Unread Mail !!!
KD6TH-4*>N2IRZ [I;0,2]:0045z, 745 msgs, #40498 last @KD6TH-4 Mailbox>

N2IRZ didn't get the First packet without errors, but did get the Second, so it sends:

N2IRZ*>KD6TH-4 [RJ;1]

Which tells KD6TH-4 that it is rejecting the received packet: N2IRZ still wants packet number 1. If both packets were received OK, N2IRZ would simply send [RR;3] and the process would continue, but if N2IRZ hadn't received EITHER packet, no response would have been sent. Then KD6TH-4 would have

started polling:

KD6TH-4*>N2IRZ [RR,P;0]

N2IRZ would reply

N2IRZ*>KD6TH-4 [RR,F;1]

Eventually, N2IRZ is finished reading the mail, so he signs off:

N2IRZ*>KD6TH-4 [I;5,2]:Bye

This is N2IRZ's frame 2, and he expects frame 5 back. KD6TH-4 responds

KD6TH-4*>N2IRZ [RR;3]
KD6TH-4*>N2IRZ [D,P]

First the "Bye" packet is acknowledged, and then KD6TH-4 initiates a disconnect. N2IRZ responds

N2IRZ*>KD6TH-4 [UA,F]

and they are disconnected. KD6TH-4 now sends out its "MAIL_FOR:" beacon:

KD6TH-4*>BBS [UI]: Mail_for: N2DSY WA2SQQ KA2USU W5GZT KB2BAV WA2SPO

This last frame is an Unnumbered Information frame. The place it is addressed to (in this case, "BBS") is specified by the UNproto command, which usually has the default of "CQ".

Now you have a good idea of what C, UA, I, RR, RJ, D and UI frames are like. A DM frame is sent when the other station is busy, or CONOk is Off, and your TNC generates a message that "KD6TH-4 is Busy", while KD6TH-4's TNC generates a "*** Connect Request: N2IRZ" message.
The other frame types are somewhat rare: RNR is sent when one station polls another ("are you there ?") but the other station isn't ready to process another packet yet. FRMR is only sent when all hell breaks loose: the Frame Type (I, UA, RR, etc) is either undefined or improper protocol (Wrong type of reply).

If you would like to learn more about the AX.25 Protocol, or Packet Radio in general, I suggest the following:

Terry Fox, "AX.25 Amateur Packet Radio, Link-Layer Protocol Version 2.0", (Available from the ARRL), October 1984.

Jim Grubbs, "Get ***CONNECTED to Packet Radio", QSKY Publishing, Springfield, Illinois. 1986. (Easy to read, great bibliography)

Max Adams, "Basic Amateur Radio Packet", CQ Magazine, November 1985, pp.13-20.

This article is part of an informal series of technical articles intended to promote experimentation, good operating habits, safety and technical knowledge. This article may be copied freely, with proper acknowledgement. Feedback is welcomed.

```
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
* 73 de Don Rotolo * Knowledge is the only instrument *
* N2IRZ@kd6th.nj.usa * of production that is not subject *
* CIS : 73227,2644 * to diminishing returns -J.M. Clark *
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
```

1032. Re: When will we get digital cellular?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-08 16:51:06 UTC
From: mynard@vmark.co.uk
Message-ID: <1993Dec8.165106.11079@vmark.co.uk>
Source record: 50865
Cross-posted to: alt.radio.scanner,rec.radio.scanner,rec.radio.amateur.digital.misc

: I don't know where to post this, so I'll give this group a try.

: I have been unable to get my wife to try for her technician class
: amateur radio licence. So, in the interest of some added security
: while she and my 4-year-old son are in the car, I am considering the
: purchase of a cellular phone.

: I know that the current system is FDMA (frequency division multiple
: access) or "analog" cellular and is easily monitored. When will
: digital cellular become the norm? I've heard that 1994 is the
: introductory time frame for initial tests.

. .

: If the digital stuff will not be around for 3 or 4 years I can understand
: the investment in analog. But if digital cellular will be available in
: a year or two, I'd rather not spend the money.

: So should I buy an "analog" celluar phone or not? Any opinions?
: Thanks.

Here in the UK digital cellular is already here. Mercury-PCN (Part owned
Cable & Wireless) launched their new digital system in the first half of
this year. Currently it only operates in the area inside the London
orbital motorway (M25). This area probably covers about 25-30% of the
total cellular customer base in this country.

Alan

--
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eMail: mynard@vmark.co.uk \/o o\/ Power House, Davy Avenue,
Tel: +44 908 234990 \ | / Knowlhill, Milton Keynes,
Fax: +44 908 234992 |v| MK5 8HJ, UK

1033. Re: COMPLETE Documented NOS Wanted

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-08 18:32:12 UTC
From: mack@helix.nih.gov
Message-ID: <1993Dec8.183212.14971@alw.nih.gov>
Source record: 50869

In article <9312012304.tn22729@aol.com> <mattharvey@aol.com> writes:
>I would like to know how I could attain a copy of the latest version of KA9Q
>unmodified NOS. I would appreciate it if I could find a package with complete
>documentation that includes the file BM.EXE. Please send responses to
>MattHarvey@aol.com OR KD4AZH@KB4GBS.#TPA.FL.US.NOAM.
>
>Thank you.
Do you know about the book from tthe ARRL (forget what it's called -
comething like NOSGUIDE). Unfortunately it's pitched at a very
low level.
Joe NA3T
mack@ncifcrf.gov

1034. Digital Cellular

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-08 19:49:04 UTC
From: dan@aznet.stat.com
Message-ID: <Hw99Dc7w165w@aznet.stat.com>
Source record: 50792

We are currently running Digital in our system, but it is still undergoing testing and is not accessible by the public just yet. We are testing the format of CDMA.

Dan

---
dan@aznet.stat.com
Daniel J. Meredith
Fax - (602) 956-2566
Voice - (602) 809-0555

1035. Re: W9GR DSP article of Sept 1992 QST

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-08 19:53:03 UTC
From: nat@kpc.com
Message-ID: <1993Dec8.195303.16870@kpc.com>
Source record: 50866

In article <1993Dec7.184551.24853@kpc.com>, nat@kpc.com (Natarajan Gurumoorthy) writes:
|> Hi,
|> I just stumbled across W9GR's article and am itching to build it.
|> I have several questions:
|> 2. The article mentions that the TI assembly files for the prom code
|> are available on compuserve. Are they also available at some internet ftp site.
|> Any pointers would be helpful.
|> 3. The article also mentions that the prom programming files are
|> also available. Again pointers would be helpful.
|>
I found these files via anonymous ftp at nic.funet.fi. Get into
the machine and cd to directory /pub/ham/dsp/w9gr. The name of the file is
w9gr.zip. The file contains the prom programming files as well as the
assembly sources for the lms and 3 CW filters. I located the files through
the archie server at UNL Nebraska.
Enjoy
Nat.

--

Natarajan Gurumoorthy AB6SJ Kubota Pacific Computer, Inc.
nat@kpc.com 2630 Walsh Avenue
Phone 408 987 3341 Santa Clara, California 95051.

1036. 9k6 baud packet - is there any point?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-08 20:27:31 UTC
From: froud@sunlab41.sx.ac.uk
Message-ID: <FROUD.93Dec8202731@sunlab41.sx.ac.uk>
Source record: 50867

Just a minor point I wouldn't mind cleared up if anyone has a few seconds...

I read that rigs had to be modified to allow upwards of 2k4 baud transmission, but is this pointless if the person you are trying to commmunicate with hasn't a repicrocal modification at the either end to allow reception of higher baud transmissions?

A contact who is actively using packet (preferably at higher speeds) and has technical knowledge of AX.25 and things like the Am7910 chip wouldn't go amiss too!

Cheers,

Dominic Froud
(just taken RAE - should find out end of January :)

1037. Re: Need advice on using tube-final rigs for RTTY/AFSK

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-08 20:42:44 UTC
From: alanb@sr.hp.com
Message-ID: <CHqHJ9.Awz@srgenprp.sr.hp.com>
Source record: 50868

Patric M Stickler (stickler@klaava.Helsinki.FI) wrote:
: I'll be shopping for a used rig soon ...
: but have heard that many older rigs have problems both from
: the 100% duty cycle and sluggish operation. ...

: How can one
: estimate the max. drive the finals can take at 100% duty cycle?

If the rig has an AM mode, use the AM carrier power rating.
Even better, mount a 3 or 5-inch muffin fan on the side of the cabinet
blowing directly on the final amplifier tubes. With that, you should
be able to run full CW power on digital modes. The main limitation then
will be the power transformer -- As long as you keep the transmit time
below 50% (at least 50% listening time), you should be OK.

AL N1AL

1038. Re: COMPLETE Documented NOS Wanted

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-08 21:48:37 UTC
From: ian@g3nrw.demon.co.uk
Message-ID: <755387317snz@g3nrw.demon.co.uk>
Source record: 50871

In article <1993Dec8.183212.14971@alw.nih.gov> mack@helix.nih.gov writes:

>Do you know about the book from tthe ARRL (forget what it's called -
>comething like NOSGUIDE). Unfortunately it's pitched at a very
>low level.
> Joe NA3T
> mack@ncifcrf.gov

Er.. it's called "NOSintro" actually. Sorry it was pitched at too
low a level.... I guess you can't please all of the people all of the
time ....

73
Ian Wade, G3NRW
(Author of "NOSintro")

<grin>
--
+---------------------------------+---------------------------------------+
Ian Wade	e-mail: ian @ g3nrw.demon.co.uk
7 Daubeney Close, Harlington,	AMPRnet: g3nrw.ampr.org [44.131.5.147]
Dunstable, Beds, LU5 6NF, UK.	AX.25: G3NRW @ GB7BIL.#27.GBR.EU
+---------------------------------+---------------------------------------+

1039. 1933 vs. 1935 HDLC

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-09 05:35:17 UTC
From: tony@mpg.phys.hawaii.edu
Message-ID: <CHr66t.3BM@news.Hawaii.Edu>
Source record: 50877

What is the difference between a WD 1933 and a WD 1935? I notice that the manual/schematic for some TNC-1 clones show a 1933 but when you pop the thing open there's a 1935 in there.

--

Antonio Querubin
tony@mpg.phys.hawaii.edu / ah6bw@uhm.ampr.org / querubin@uhunix.bitnet

1040. How much time does a G3RUH modem take to acquire signal?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-09 06:41:00 UTC
From: ka7oei@uugate.wa7slg.ampr.ORG
Message-ID: <38004@uugate.wa7slg.ampr.org>
Source record: 50876

When a 9600 baud modem of the G3RUH/K9NG-type hears a signal, how long does it take (or more accurately, how many bit periods) does it take to begin to properly decode data?

If it is just a matter of getting a few bit periods to sync the state machine, and then, say, 17 more to get the descrambler working, then 20 milliseconds should be more than enough time to get things working.

In practical experience, how long *does* it take for the modem to start decoding data properly (at 9600 baud?)

Thanks,

<Clint>

1041. Re: 9k6 baud packet - is there any point?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-09 07:15:38 UTC
From: dave@llondel.demon.co.uk
Message-ID: <755446538snx@llondel.demon.co.uk>
Source record: 50795

In article <FROUD.93Dec8202731@sunlab41.sx.ac.uk> froud@sunlab41.sx.ac.uk (How much wood could a woodchuck chuck if a woodchuck could chuck wood?) writes:
>Just a minor point I wouldn't mind cleared up if anyone has a few seconds...
>
>I read that rigs had to be modified to allow upwards of 2k4 baud transmission,
>but is this pointless if the person you are trying to commmunicate with
>hasn't a repicrocal modification at the either end to allow reception of
>higher baud transmissions?
>
Unlike land-line modems, there is no speed negotiation on packet (unless you are using strange kit) so you have to set up your rig/TNC to work at a particular speed. Once you have tried 9600baud you will think that 1200 is *very* slow. It isn't hard to modify rigs either....

Dave
--

****
* G4WRW @ GB7WRW.#41.GBR.EU AX25 * Start at the beginning. Go on *
* dave@llondel.demon.co.uk Internet * until the end. Then stop. *
* g4wrw@g4wrw.ampr.org Amprnet * (the king to the white rabbit) *
****

1042. Re: COMPLETE Documented NOS Wanted

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-09 10:48:00 UTC
From: stocker@nssdca.gsfc.nasa.gov
Message-ID: <9DEC199306480878@nssdca.gsfc.nasa.gov>
Source record: 50880

In article <755387317snz@g3nrw.demon.co.uk>, Ian@g3nrw.demon.co.uk writes...
>In article <1993Dec8.183212.14971@alw.nih.gov> mack@helix.nih.gov writes:
>
>>Do you know about the book from tthe ARRL (forget what it's called -
>>comething like NOSGUIDE). Unfortunately it's pitched at a very
>>low level.
>> Joe NA3T
>> mack@ncifcrf.gov
>
>Er.. it's called "NOSintro" actually. Sorry it was pitched at too
>low a level.... I guess you can't please all of the people all of the
>time ....
>
>73
>Ian Wade, G3NRW
>(Author of "NOSintro")
>
><grin>
>--
>+---------------------------------+---------------------------------------+
>| Ian Wade | e-mail: ian @ g3nrw.demon.co.uk |
>| 7 Daubeney Close, Harlington, | AMPRnet: g3nrw.ampr.org [44.131.5.147] |
>| Dunstable, Beds, LU5 6NF, UK. | AX.25: G3NRW @ GB7BIL.#27.GBR.EU |
>+---------------------------------+---------------------------------------+

Well Ian!

I have to say that I don't think that it was pitched at too low a level. I felt that it stated quite clearly what its purpose was. I have read it through twice now and am still getting information about the NOS environment out of it. It never intended to be a tutorial on TCP/IP nor should it have been there are plenty of those available.

I have enjoyed the work and am still enjoying it. I don't think anything else available comes close to providing the information needed to optimize the NOS environment. I'm getting close to the point where I feel that I can really do that.

Now if we could really get some fast TCP/IP packet based networks going in the US, I'd be really happy.

thanks for your work and your efforts.

Erich Stocker
N3OXM

1043. F6FBB release 5.15b ?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-09 11:03:29 UTC
From: CATALAN@VORTEX.UFRGS.BR
Message-ID: <01H69QJOLE3M000UMZ@vortex.ufrgs.br>
Source record: 50878

Can someone please tell me if is available the new release 5.15b of the
F6FBB bbs software ? If so, where can be ftp'ed ?
Tks, 73,

Luiz Catalan
internet: catalan@vortex.ufrgs.br
packet: pp5aq@pp5aq.bra.sa

1044. Re: Digital w/ SB - use hamcom for rtty

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-09 11:12:35 UTC
From: schro@nessos.sni.de
Message-ID: <schro.755435555@nessos>
Source record: 50879

In <3510@cronos.metaphor.com> henniger@Metaphor.COM (Mickey Henniger) writes:
>In article <1993Dec7.154148.5968@nrtpa038.bnr.ca>, cnc23a@b4pph13e.bnr.ca (Ken Edwards) writes:
>|>
>|> In your previous article, you wrote:
>|>
>|> > Can someone please tell me if there is any software that uses a Sound
>|> > Blaster to receive CW,RTTY,SSTV,PACKET,etc,etc.
>|> >

>for rtty use hamcom22.zip

HamComm 2.2 decodes (and generates) cw and rtty signals but *NOT*
with a soundblaster. It uses a very simple interface with just one
chip that can be built in half an hour. Total cost in parts is about $10.

JVFAX 6.0 decodes (and generates) FAX and SSTV signals with the same
interface.

Both programs are available via ftp from oak.oakland.edu,
pub/msdos/hamradio.

73 de Django
DL5YEC
(HamComm expert :-)

1045. AMTOR on THETA 7000,9000

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-09 13:36:57 UTC
From: sv1bds@intranet.GR
Message-ID: <9312091336.AA13323@osi1.intranet.gr>
Source record: 50793

Does any one have any info for running
AMTOR with THETA 7000 or 9000 RTTY rigs?
Please reply direct to me.
George Katsimaglis sv1bds@intranet.gr

1046. Re: COMPLETE Documented NOS Wanted

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-09 13:40:18 UTC
From: sbrown@charon.dseg.ti.com
Message-ID: <SBROWN.93Dec9074018@charon.dseg.ti.com>
Source record: 50884

Ian writes:

> In article <1993Dec8.183212.14971@alw.nih.gov> mack@helix.nih.gov writes:
>
> >Do you know about the book from tthe ARRL (forget what it's called -
> >something like NOSGUIDE). Unfortunately it's pitched at a very
> >low level.
> > Joe NA3T
> > mack@ncifcrf.gov
>
> Er.. it's called "NOSintro" actually. Sorry it was pitched at too
> low a level.... I guess you can't please all of the people all of the
> time ....
>
> 73
> Ian Wade, G3NRW
> (Author of "NOSintro")
>
> <grin>

I meant to respond to the author of the original comment yesterday. I would think that a book called "NOSintro" might reasonably contain introductory material! Maybe Joe would be happier reading the source code. ;-)

Ian, I have your book and I highly recommend it to anyone just getting started in the NOS world.

```
*******************************************
| Steve Brown, WD5HCY | |
| sbrown@charon.dseg.ti.com | Simplicate |
| wd5hcy@wd5hcy.ampr.org | and add |
| [44.28.0.61] | lightness. |
| wd5hcy@kf5mg.#dfw.tx.usa.na | |
*******************************************
```

1047. Re: Digital w/ SB - use hamcom for rtty

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-09 14:19:02 UTC
From: cnc23a@b4pph13e.bnr.ca
Message-ID: <1993Dec9.141902.9745@brtph560.bnr.ca>
Source record: 50881

In article <schro.755435555@nessos>, schro@nessos.sni.de (W.F.Schroeder) writes:
|> In <3510@cronos.metaphor.com> henniger@Metaphor.COM (Mickey Henniger) writes:
|> >In article <1993Dec7.154148.5968@nrtpa038.bnr.ca>, cnc23a@b4pph13e.bnr.ca (Ken Edwards) writes:
|> >|>
|> >|> In your previous article, you wrote:
|> >|>
|> >|> > Can someone please tell me if there is any software that uses a Sound
|> >|> > Blaster to receive CW,RTTY,SSTV,PACKET,etc,etc.
|> >|> >
|>
|> >for rtty use hamcom22.zip
|>
|> HamComm 2.2 decodes (and generates) cw and rtty signals but *NOT*
|> with a soundblaster. It uses a very simple interface with just one
|> chip that can be built in half an hour. Total cost in parts is about $10.
|>
|> JVFAX 6.0 decodes (and generates) FAX and SSTV signals with the same
|> interface.
|>
|> Both programs are available via ftp from oak.oakland.edu,
|> pub/msdos/hamradio.
|>
|> 73 de Django
|> DL5YEC
|> (HamComm expert :-)

FYI:

I was quoted incorrectly here, this was my ENTIRE posting (I hate being misquoted !)

Article: 1260 of rec.radio.amateur.digital.misc
Newsgroups: rec.radio.amateur.digital.misc
Path: nrtpa038!b4pph13e!cnc23a
From: cnc23a@b4pph13e.bnr.ca (Ken Edwards)
Subject: RE: Digital with Sound Blaster???
Message-ID: <1993Dec7.154148.5968@nrtpa038.bnr.ca>
Sender: cnc23a@b4pph13e (Ken Edwards)
Organization: Bell-Northern Research, Ottawa, Canada
Date: Tue, 7 Dec 1993 15:41:48 GMT
Lines: 46

In your previous article, you wrote:

> Can someone please tell me if there is any software that uses a Sound
> Blaster to receive CW,RTTY,SSTV,PACKET,etc,etc.

>
> Thanks, 73,
> --
> Scott R. Weis KB2EAR
> Internet: kb2ear@kb2ear.ampr.org
> Snail Mail: 10 Palmer Rd., Kendall Park, NJ, 08824-1228
> Phone: +1 908 297 0469

I'm sorry for not e-mailing, but my mail sys is funny.

For CW : FFTMORSE by Francois Jalbert (jalbert@IRO.UMontreal.CA)

For SSTV: SLOWSC by Gene Harlan WB9MMM

For DTMF: _DMTF by Peter Jennings VE3SUN

I found these on my SIMTEL CD,

a local ham has developed a RTTY program, but has not generally released it.

PACKET ????

Hope this is of some help.

73s es CUL N4ZBB

--
==========

Ken M. Edwards, PE Bell Northern Research, Research Triangle Park, NC
(919) 481-8476 email: cnc23a@bnr.ca Ham: N4ZBB

All opinions are my own and do not necessarily reflect the views of
my employer or co-workers, family, friends, congress, or president.

(To the e-mail'r out there -> This is a short as it will gets)

1048. Re: COMPLETE Documented NOS Wanted

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-09 15:06:21 UTC
From: kf5mg@vnet.ibm.com
Message-ID: <CHrwMM.32G2@hawnews.watson.ibm.com>
Source record: 50883

>>>Do you know about the book from tthe ARRL (forget what it's called -
>>>comething like NOSGUIDE). Unfortunately it's pitched at a very
>>>low level.
>>Er.. it's called "NOSintro" actually. Sorry it was pitched at too
>>low a level.... I guess you can't please all of the people all of the
>>time ....
>>Ian Wade, G3NRW

I took the comment to mean that the ARRL is pitching/selling the book without
much support. All they have is a small, box ad that seems to float around
alot. It's not part of their regular ARRL Book ad.

As for the book it self.... even though it does not go into as much detail
as I'd like, I think that it's a GREAT book for the beginning TCP/IPer.
Several local users have used it as a starting off place to get into
TCP/IP and packet. It's definitely worth the price.

73's de Jack - kf5mg
AX25net - kf5mg@kf5mg.#dfw.tx.usa.na - (817) 962-4409
Internet - kf5mg@kf5mg.ampr.org - 44.28.0.14
Worknet - kf5mg@vnet.ibm.com

1049. amatuer radio

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-09 15:16:24 UTC
From: jangus@skyld.tele.com
Message-ID: <755450184snx@skyld.tele.com>
Source record: 50801

In article <1993Dec7.160318.8345@ccsvax.sfasu.edu> z_addicksda@ccsvax.sfasu.edu writes:

>
> I would just like to say that I think amatuer radio is the greatest
> thing in the world. It is
>

Personally, I would prefer amateur radio.

An .edu site, guess the entrance exams went down again.

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "It is difficult to imagine our
Internet: jangus@skyld.tele.com | universe run by a single omni-
US Mail: PO Box 4425 Carson, CA 90749 | potent god. I see it more as a
Phone: 1 (310) 324-6080 | badly run corporation."

1050. Re: COMPLETE Documented NOS Wanted

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-09 15:20:55 UTC
From: mack@helix.nih.gov
Message-ID: <1993Dec9.152055.3828@alw.nih.gov>
Source record: 50882

In article <755387317snz@g3nrw.demon.co.uk> Ian@g3nrw.demon.co.uk writes:
>In article <1993Dec8.183212.14971@alw.nih.gov> mack@helix.nih.gov writes:
>
>>Do you know about the book from tthe ARRL (forget what it's called -
>>comething like NOSGUIDE). Unfortunately it's pitched at a very
>>low level.
>> Joe NA3T
>> mack@ncifcrf.gov
>
>Er.. it's called "NOSintro" actually. Sorry it was pitched at too
>low a level.... I guess you can't please all of the people all of the
>time ....
>
>73
>Ian Wade, G3NRW
>(Author of "NOSintro")
Dear Ian,
Well thanks for writing the book anyhow. I have it on the floor
under the operating table, so that I can refer to it whenever I need
it.

I found the docs that came with NOS
absolutely inscrutable, and there was no hope of me ever getting it
going by myself so I was looking forward to your book with great
anticipation for quite a while. Unfortunately it came out without
any fanfare (that I heard about) and I only found out that it existed
when I went to the League one day and saw it on display. After reading
your book I realised that I had the info neccessry to do the whole job
of setting up the KA9Q code myself. So thanks very much - I owe it all
to you. I realise tht writing books like this takes a long time (I
guess about a year) and that you had to choose your audience so that
you got through to the maximum audience. Perhaps for people like me in
the next edition you could have a "quick start" chapter, with an
appendix explaining the commands with examples of the syntax.

The problem now is what can you do with 1/10 share of 1200bd?

Tnx Joe NA3T
mack@ncifcrf.gov

1051. Re: COMPLETE Documented NOS Wanted

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-09 16:29:59 UTC
From: msw1633@tamsun.tamu.edu
Message-ID: <2e7jq7$87o@tamsun.tamu.edu>
Source record: 50798

In article <9DEC199306480878@nssdca.gsfc.nasa.gov>,
ERICH FRANZ STOCKER <stocker@nssdca.gsfc.nasa.gov> wrote:
>
>I have enjoyed the work and am still enjoying it. I don't think anything else
>available comes close to providing the information needed to optimize the
>NOS environment. I'm getting close to the point where I feel that I can
>really do that.
>
>Erich Stocker
>N3OXM

Er.. so where do we get this tome? I sure could use an introduction to
NOS. Is it available by ftp or is it only available through the ARRL?

Thanks

Mark

--
Mark S. Whitsitt, N5RJF Texas A&M University, Dept of Biochemistry
Internet: mwhitsitt@tamu.edu College Station, Tx. 77843-2128
AMPRnet: n5rjf@n5rjf.ampr.org (409) 845-0832

1052. Re: Need advice on using tube-final rigs for RTTY/AFSK

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-09 16:50:30 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1993Dec9.165030.12456@ke4zv.atl.ga.us>
Source record: 50796

In article <CHqHJ9.Awz@srgenprp.sr.hp.com> alanb@sr.hp.com (Alan Bloom) writes:
>Patric M Stickler (stickler@klaava.Helsinki.FI) wrote:
>: How can one
>: estimate the max. drive the finals can take at 100% duty cycle?
>
>If the rig has an AM mode, use the AM carrier power rating.

Good.

>Even better, mount a 3 or 5-inch muffin fan on the side of the cabinet
>blowing directly on the final amplifier tubes. With that, you should
>be able to run full CW power on digital modes. The main limitation then
>will be the power transformer -- As long as you keep the transmit time
>below 50% (at least 50% listening time), you should be OK.

Not so good. The limitation isn't usually raw envelope temperature, it's
the temperature of the plate structure and the seals at the connections.
With sweep tubes, you can't cool them effectively enough with a muffin fan
to get even 50% power, much less 100% power when key down time exceeds a
few seconds. The plate structures aren't up to it, and you need to get
airflow across the base seals, and they're masked by the tube socket.
Real transmitting tubes are better because their plate structures are
heavier, but you still have seal problems unless you have air sockets.
Best, of course, are external anode tubes mounted in proper air sockets
with proper chimneys.

Low duty cycles are good, but you still have to watch absolute key
down times. If the key down time exceeds the thermal inertia of the
tube, you've got to treat it like it's 100% duty cycle use.

Gary
--
Gary Coffman KE4ZV | I kill you, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | You kill me, | uunet!rsiatl!ke4zv!gary
534 Shannon Way | We're the Manson Family | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -sorry Barney |

1053. Re: How much time does a G3RUH modem take to acquire signal?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-09 17:27:09 UTC
From: glenne@sad.hp.com
Message-ID: <CHs35A.Juw@srgenprp.sr.hp.com>
Source record: 50885

ka7oei@uugate.wa7slg.ampr.ORG (ka7oei@uugate.wa7slg.ampr.ORG) wrote:

: In practical experience, how long *does* it take for the modem to start
: decoding data properly (at 9600 baud?)

I don't know about the G3RUH modem but a stock TNC2 with MFJ code in
it allows TxD=0 and TXDIDDLE on. TXDIDDLE sends TXCHARS *8 worth of
edges to prime the RxClock recovery circuit. With TXCHARS set to 2 and
data rate set to 38.4 kbps, packets beginning about 500 microseconds
after RTS is asserted (keyup) get through fine. In fact, I think they
get through fine with TXCHARS set to 1.
I see no reason that it shouldn't be able to do it after about 4 characters
delay.

I now have data derived DCD circuits in some of the TNCs in which I
made the above measurements and haven't remeasured so I can't be sure
what they do now. However, watch out for the DCD attack and delay time
constants associated with many (TAPR, PacComm...) DCD circuits though.
They are apparantly optimized for 1200 bps and can significantly degrade
throughput in a faster system. I know this part wasn't your original
question but it may be relevant.

73
Glenn n6gn

1054. SATGATE route needed!

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-09 17:31:26 UTC
From: enge@enge.almaden.ibm.com
Message-ID: <2e7nde$obh@juniper.almaden.ibm.com>
Source record: 50886

Our local satellite gateway for BBS traffic is W9HGI. Unfortunately, the system there is down right now and I have piles of messages awaiting upload piling up.

I am looking for someone who is close to another gateway that can take my traffic. I can either phone forward or I can send you the file in "IMPORT" format via e-mail here on the Internet.

Please respond via e-mail so we don't clutter the news group up.

Roy Engehausen, AA4RE
enge@almaden.ibm.com

1055. Re: Modifying the 16550 chips on the RS-232 cards

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-09 19:18:51 UTC
From: garyf@wang.com
Message-ID: <CHs8BG.50z@wang.com>
Source record: 50797

postmaster@asarin.ORG.AR writes:

>==
>Modifying the 16550 chips on the RS-232 cards

>-----------[Now, the file 16550mod.txt]-------------------------------------

>Notes on a modification to PC's using the INS16550A UART IC for reception of
>9600bps data from the UO-22 satellite. These form the basis of an article to
>be published in Amsat-UK's journal OSCAR NEWS to whom permission to copy this
>article, and the accompanying diagram, for publication should be sought.

>Background
>==========
>Most PC's use the 16450 UART IC for serial communications (also equivalent to
>the INS8250A and CMOS versions of both). With the advent of 9600bps satellite
>communications some folks, especially with slower PS's, noticed that they got
>errors on the TNC-to-PC link; this shouldn't happen ! The finger of suspicion
>pointed to the software making disk accesses and missing receive data whilst
>doing so. The 16550A UART (and CMOS 82C550A) is functionally equivalent to the
>16450 but has an internal FIFO store holding 16 bytes of data and someone put
>the thought forward to try it. It certainly cleared up problems for some folks
>but others had a change of symptom; PB would just stop receiving even though
>data was coming from the TNC to the PC. After much research and international
>co-operation I think we have a hardware solution to these problems.

>The solution supposes that the reason for the apparent freezing of PB is due
>to the fact that the 16550A interrupt line goes high to assert and stays high
>until the interrupt is serviced. (The more common 16450 IC also does this; I
>don't know why PC's don't freeze with it.) If the PC is serving another
>interrupt at the time the 16550A asserts then the new one doesn't get to be
>seen ... hence no receive data. I have actually seen this happen on an
>oscilloscope and the interrupt line was stuck high at the time of the freeze.

Your observation is correct, but there is a simple software solution to the
problem. The basic problem is that the IBM PC uses edge triggered interrupts
instead of level triggered ones (I'd like to strangle the guy at IBM who
made that decision). A properly written COM port driver should clear the
interrupt as early in the interrupt handler as possible and then just before
re-enabling interrupts and exiting it should check whether any additional
characters are available and if there are, read those too.

>The earlier belief that the FIFO needs to be switched ON is not correct, the
^^

Yes it is! The FIFO does NOT default to being used. The COM port driver (BIOS)
needs to be 16550 aware and enable the FIFO. The reason it doesn't default to

ON is that software that is not aware of the FIFO would get confused by it.

>FIFO in the 16550A is operative all the time; the software issued some time
>ago merely sets different TRIGGER levels for the UART's "data available" flag.

It looks like you did a lot of work on this, but I think you got carried
away with a hardware fix for a software problem.

Gary
--
--/* Gary A. Field - WA1GRC, Wang Labs M/S 019-72B, 1 Industrial Ave
Lowell, MA 01851-5161, (508) 967-2514, email: garyf@wiis.wang.com, EST5EDT
A waist is a terrible thing to mind! */

1056. Re: When will we get digital cellular?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-09 22:52:58 UTC
From: mike%jim@wupost.wustl.edu
Message-ID: <1993Dec09.225258.27287%jim@wupost.wustl.edu>
Source record: 50803
Cross-posted to: alt.radio.scanner,rec.radio.scanner,rec.radio.amateur.digital.misc

jlwei@ArtSci.WuStL.EDU (Jesse Lynn Wei) writes:

>Anybody else seen these ads? I'm in St. Louis and read it in the
>Post-Dispatch. A two-page ad, I believe.

Yep, they've been doing a lot of TV advertising as well (the commercial
has a stream of binary numbers blasting across the screen and the voiceover
starts out with "This may be exciting to watch, but wait until you hear
the difference" or something similar).

Mike
--
mike%jim@wupost.wustl.edu

1057. C SOURCE FOR PBBS??

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-10 01:32:24 UTC
From: TGOODIN@delphi.com
Message-ID: <931209.73944.TGOODIN@delphi.com>
Source record: 50802

I am looking for C Sources for any kind of PBBS for Packet that I might
be able to compile for use in my unix (ATT 3B2) machine.
TGOODIN @ DELPHI.COM
KD4OFO @ W4NJA
Tim

1058. HP48 Communications

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-10 05:12:47 UTC
From: jann0004@maroon.tc.umn.edu
Message-ID: <jann0004-091293230819@dialup-1-75.gw.umn.edu>
Source record: 50833

I am looking for a cheap way to communicate between two HP-48 calculators (longer than the build in IR can do), maybe 50-100 feet. I have heard of people modifying walkie-talkies to use with the hp48. I don't want to use TNC equipment....too expensive for me.
How would I go about modifying a walkie-talkie to do digital communications? I don't care about error checking or anything, just a way to send simple ascii messages.
Can anyone help me with doing this?

Thanks

1059. W9GR DSP article of Sept 1992 QST

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-10 08:08:40 UTC
From: G.POLDER@CPRO.AGRO.NL
Message-ID: <9312100808.AA15738@ganges.agro.nl>
Source record: 50790

Natarajan Gurumoorthy writes:

>Hi,
> I just stumbled across W9GR's article and am itching to build it.
>I have several questions:
> 1. is the PC board available. I can get hold of the parts locally.
in the article information is given how to order the kit or proms,
I'm not sure about the PC board.

> 2. The article mentions that the TI assembly files for the prom code
>are available on compuserve. Are they also available at some internet ftp site.>
look at nic.funet.fi in /pub/ham/dsp/w9gr

>Any pointers would be helpful.
> 3. The article also mentions that the prom programming files are
>also available. Again pointers would be helpful.
>
they are all gathered in one zip file.

I thougt of buying a w9gr kit, a couple of months ago, but I then
heard of the TI DSP Starter Kit (DSK), which costs the same ($99)
and is much more flexible, because you can control and load software
from a host computer. So i decided to buy that in stead of the
w9gr kit. It must be very simple to convert the w9gr 32010 software
to the 32020 processor.

Gerrit, PA3BYA.

1060. Re: COMPLETE Documented NOS Wanted

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-10 12:41:00 UTC
From: eeyimkn@unicorn.nott.ac.uk
Message-ID: <2e9qos$n9b@unicorn.ccc.nottingham.ac.uk>
Source record: 50889

Hi folks,
You might like to know that I'm currently working on a (relatively brief) guide to getting up and running with NOS, provisionally entitled 'NOS for Dummies'. This may change :-)

It won't cover nearly as much in depth as Ian's book, but should be able to help with the basics of starting up. It'll be freely available as TeX source or Postscript. I started it earlier this year as a mini-project, but it's grown out of all proportion, so I'll probably finish it some time next spring, depending on whether I include the stuff about running IP through Linux or not, and on how long it takes for me to finish porting the existing text from Micro$oft Word to TeX..

73 Mike G7GPA

--
+- Mike Knell, University of Nottingham, UK -=- M.Knell@unicorn.nott.ac.uk --+
| --THIS SPACE TEMPORARILY BLANK-- | AMPR: g7gpa@hobbes.g7gpa.ampr.org |
| (until I can think of a decent joke)| AX25: g7gpa@g7gpa.gb7bad.#23.gbr.eu |
|UNDER the overpass! OVER the underpass! Around the future and BEYOND REPAIR!|

1061. Re: HP48 Communications

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-10 14:39:06 UTC
From: kharker@bnr.ca
Message-ID: <2ea1ma$knd@crchh941.bnr.ca>
Source record: 50800

In article <jann0004-091293230819@dialup-1-75.gw.umn.edu>, jann0004@maroon.tc.umn.edu (Scott Jann) writes:
|> I am looking for a cheap way to communicate between two HP-48 calculators
|> (longer than the build in IR can do), maybe 50-100 feet. I have heard of
|> people modifying walkie-talkies to use with the hp48. I don't want to use
|> TNC equipment....too expensive for me.
|> How would I go about modifying a walkie-talkie to do digital
|> communications? I don't care about error checking or anything, just a way
|> to send simple ascii messages.
|> Can anyone help me with doing this?
|>
|> Thanks

As another idea, I have seen infrared "repeaters" little red pyramid-shaped things that relay the signals of tv remotes and whatnot. Perhaps a strategically placed one (if you're going to be using the calculators basically in the same area all the time) would do the trick. Don't know where you'd go to find one of these things. Probably saw it in a Damark catalog or someplace like that.

--
Kenneth E. Harker BNR "Any opinions expressed
kharker@bnr.ca Richardson, Texas, USA are solely mine and do
N1PVB (214) 684-5115 not represent BNR"

1062. Re: When will we get digi

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-10 14:47:00 UTC
From: mario.campos@cld9.com
Message-ID: <7.1433.1394.0N56B956@cld9.com>
Source record: 50745

Quoting JLWEI@ARTSCI.WUSTL.EDU to ALL:

JL>: amateur radio licence. So, in the interest of some added security
JL>: while she and my 4-year-old son are in the car, I am considering the
JL>: purchase of a cellular phone.

How about a 44 magnum?

=: Mario A. Campos - N6ALS | mario.campos@nitelog.com | DXCC #24824 :=
=: Monterey, CA 93940 USA | N6ALS@K6LY.#NOCAL.CA.USA.NA | WAS #33960 :=

Message written at 8:36am, on Friday, December 10, 1993.
---
* [R2.00o] * Usenet * Nitelog BBS * Monterey CA * 408-655-1096

1063. Assigning NL-calls for packet radio in the Netherlands???

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-10 15:15:02 UTC
From: vandeput@ebv.eb.ele.tue.nl
Message-ID: <2ea3pm$e3l@tuegate.tue.nl>
Source record: 50815

[No readable article body recovered]

1064. Re: COMPLETE Documented NOS Wanted

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-10 16:57:36 UTC
From: ian@g3nrw.demon.co.uk
Message-ID: <755542656snz@g3nrw.demon.co.uk>
Source record: 50791

In article <2e7jq7$87o@tamsun.tamu.edu> msw1633@tamsun.tamu.edu writes:

>In article <9DEC199306480878@nssdca.gsfc.nasa.gov>,
>ERICH FRANZ STOCKER <stocker@nssdca.gsfc.nasa.gov> wrote:
>>
>>I have enjoyed the work and am still enjoying it. I don't think anything else
>>available comes close to providing the information needed to optimize the
>>NOS environment. I'm getting close to the point where I feel that I can
>>really do that.
>>
>>Erich Stocker
>>N3OXM
>
>Er.. so where do we get this tome? I sure could use an introduction to
>NOS. Is it available by ftp or is it only available through the ARRL?
>
>Thanks
>
>Mark
>

Was it something I said? Since the original post in this thread I've
been snowed under with requests for more information on the book "NOSintro".
To save repeating the details "n" times to individuals, I thought I'd save
network bandwidth by posting once to this thread.

So here goes:

```
* * * * * * * * * * * * * * * *
* ---------- *
* "NOSintro" *
* ---------- *
* *
* An Introduction to the *
* KA9Q *
* Network Operating System *
* *
* by Ian Wade, G3NRW *
* *
* *
* A "DOWERMAIN" PUBLICATION *
* *
* ISBN 1-897649-00-2 *
* *
* * * * * * * * * * * * * * * *
```

356 pages, fully illustrated.

"NOSintro" is the definitive guide to the KA9Q Network Operating System (NOS).

In "NOSintro" you'll find a wealth of practical information, hints and tips for setting up and using the KA9Q NOS.

Ideal for beginners and more advanced users alike.

The emphasis is on hands-on practicalities. You'll see exactly:

** how to install NOS on a PC.

** how to set up the control files.

** how to check out basic operations before going live.

** how to use NOS commands for transferring files, logging in to remote systems, sending mail and so on.

==========
What's Inside
==========

1 Intro to "NOSintro"
2 "NOSview"
3 The Ground Rules
4 NOS in a Nutshell
5 Let's Meet the Locals
6 The TNC Revisited
7 A Peek at Protocols
8 Names, Domains and Addresses
9 Client/Server
10 Hands On - Hardware Checkout
11 Hands On - Software Installation
12 NOS File Compendium
13 Hands On - Session Manager
14 The NOS Command Set
15 Hands On - autoexec.nos
16 The ftpusers File
17 Hands On - FTP
18 NOS BBS - The Big Picture
19 Setting up the NOS BBS
20 The NOS BBS Command Set
21 Hands On - BBS File Server
22 Hands On - Remote Sysop
23 Forwarding SMTP Mail
24 Pop Mail Collection
25 PBBS Mail Forwarding
26 AX.25 Routing
27 Address Resolution Protocol

28 IP Routing
29 NET/ROM Routing
30 Going Live: Preparing the Files
31 Hands On - AX.25
32 Hands On - NET/ROM
33 Hands On - Ping and Hop
34 Hands On - DNS System
35 Trailing Flag

==========
Appendices
==========
1 Where to get the Software
2 NOS Command Set Reference
3 NOS Control Files
4 Character Codes
5 IP Address Coordinators
6 References

** 356 pages, copiously illustrated with over 80 detailed diagrams, plus countless examples of commands and screen displays.

** Extensive and detailed appendices.

** Full listings of all the control files needed for NOS.

** Although specifically written for a DOS environment, most of the text is equally applicable to OS/2, Windows/NT, Amiga, Atari, MAC, UNIX, VMS and Archimedes implementations of NOS.

==
What they've been saying about "NOSintro"
==

I just received my copy of your book last night and I think it's GREAT!! It helped me fix a few problems with my JNOS setup after only glancing thru it for a few minutes. From now on I shall call your NOSintro ..."THE NOS-Bible"!!!!! -- Bob Merritt, KA4BYP

Helluva book and nifty software package! A lotta guys at HQ are into it, and W1AW is running your NOSview! The station manager, Jeff Bauer, WA1MBK, asked me to help him tweek it up and it's running pretty much around the clock -- Brian Battles, WS1O, QST Features Editor, ARRL.

Your book is well designed and I will recommend it to radio amateurs in the Netherlands in my column "Radio and Computer" in Electron -- Kees Olievier, PE1AIO.

I am VERY impressed. Thanks for your many hours of effort. You have made NOS a lot more understandable and usable -- and I've

been running NOS here for more than 3 years! -- Alan D Scott, N9BAC, Department of Anatomy, Indiana University School of Medicine.

I must congratulate you on an excellent book. I found the book struck just the right balance between theory and practice -- Fred Dawson, G1HCM.

The "NOSintro" book is an excellent piece of technical writing that should become the standard reference work on TCP/IP over packet radio -- Terry Thirlwell, G8AHS.

It's 350+ pages, and appears to be quite thorough. The few chapters I've had time to browse are rather readable, with good illustrations and plenty of examples. This might be the book that finally gets packet people off their NET/ROM duffs and into real ham radio networking! -- Brian Kantor, WB6CYT, University of California.

Thank you for your copy of "NOSintro" which I received safely last Friday. As it happened, I had a bad night and ended up by reading it in the small hours and can accordingly give you a free testimonial as to its efficacy in putting one to sleep at 0500! - Smudge Lundegard, G3GJW, RSGB Council and former BARTG President

I am professionally involved in communications and networking, and it is one of the most lucid books on the subject I have seen -- John Lee, York.

I have just obtained a copy of your book and am very impressed with it. It must have been a major undertaking to pack so much detailed information into such a concise but very readable format. I think your diagrams are immensely helpful in this respect -- David, GM4XNQ

This gives the best and the most comprehensive hands-on introduction to the KA9Q Network Operating System that I've come across. Diagrams, screen displays and so on make reading of what is, essentially, a "heavy" subject quite light going, even for me! I would recommend the book to both old hands on TCP/IP as well as advanced beginners who'd like to go one further than what is often regarded as the "common" type of packet radio -- Chris Lorek, G4HCL, Ham Radio Today.

==========
How to get "NOSintro"
==========

All prices are in GB pounds sterling, and include packing and postage.

Mail to UK addresses: 12.85 GB pounds
Airmail to rest of Europe: 14.42 GB pounds

Airmail to Americas, Africa: 16.73 GB pounds
Airmail to rest of the world: 17.34 GB pounds

Payment either:

1. By cheque, in GB pounds sterling, DRAWN ON A UK BANK ONLY. Cheque to be made payable to "DOWERMAIN LTD" and crossed "A/C PAYEE ONLY". No other banks or currencies please; it's too expensive to convert to sterling.

or

2. By credit card. You will be charged the appropriate price listed above in GB pounds sterling. Your credit card company will add a nominal currency conversion charge if applicable.

To obtain your copy, please print out and fill in the order form below:

--------------------------- cut here ----------------------------

"NOSintro" ORDER FORM

Name: .....

Address: .....

.....

.....

.....

Please send me a copy of "NOSintro" and bill my credit card:

12.85 / 14.42 / 16.73 / 17.34 GB pounds
(delete where not applicable)

Credit Card No (VISA/Mastercard/Eurocard): .....

Expiry Date: .....

Signature: .....

--------------------------- cut here ----------------------------

then mail to:

DOWERMAIN LTD
7 Daubeney Close
Harlington
DUNSTABLE
Bedfordshire
LU5 6NF
United Kingdom

(Please note: your order must be in written/printed form.
We cannot accept orders by phone or fax or electronic mail).

"NOSintro" is also available in the United States from ARRL,
225 Main Street, Newington, CT 06111-1494.
Tel: (203)-666 1541
Fax: (203)-665 7531
Please contact them direct for pricing.

P.S. The book "NOSintro" makes several references to the
"NOSview" software package. This package contains a
full working set of KA9Q NOS software, complete with
all the control files listed in the book.

The "NOSview" software is available free of charge.
If you would like a copy, enclose a DOS-formatted
diskette (any size EXCEPT 360KB) with your order for
the book. N.B. I can only supply the software in
DOS format.

73
Ian Wade
G3NRW

--
+---------------------------------+--+
Ian Wade	e-mail: ian @ g3nrw.demon.co.uk
7 Daubeney Close, Harlington,	AMPRnet: g3nrw.ampr.org [44.131.5.147]
Dunstable, Beds, LU5 6NF, UK.	AX.25: G3NRW @ GB7BIL.#27.GBR.EU
+---------------------------------+--+

1065. Re: 9k6 baud packet - is there any point?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-10 17:10:25 UTC
From: debaker@bnr.ca
Message-ID: <2eaai1$3ca@crchh7b0.bnr.ca>
Source record: 50835

In article <755446538snx@llondel.demon.co.uk>, dave@llondel.demon.co.uk (David Hough) writes:
|> In article <FROUD.93Dec8202731@sunlab41.sx.ac.uk> froud@sunlab41.sx.ac.uk (How much wood could a woodchuck chuck if a woodchuck could chuck wood?) writes:
|> >Just a minor point I wouldn't mind cleared up if anyone has a few seconds...
|> >
|> >I read that rigs had to be modified to allow upwards of 2k4 baud transmission,
|> >but is this pointless if the person you are trying to commmunicate with
|> >hasn't a repicrocal modification at the either end to allow reception of
|> >higher baud transmissions?
|> >
|> Unlike land-line modems, there is no speed negotiation on packet (unless you
|> are using strange kit) so you have to set up your rig/TNC to work at a
|> particular speed. Once you have tried 9600baud you will think that 1200 is
|> *very* slow. It isn't hard to modify rigs either....

^^

OK, now I am ready to get some info on modifying rigs for 9600! I have a kenwood TM-742A that I would like to use...does anyone know where I can find information explaining how to do this?

Also, how do I go about finding a 'full sevice PBBS' (if that is what I am looking for) in order to send long distance packet mail, i.e. to an address of a person in another city or state (or country)??

|>
|> Dave
|> --
|>
|> **
|> * G4WRW @ GB7WRW.#41.GBR.EU AX25 * Start at the beginning. Go on *
|> * dave@llondel.demon.co.uk Internet * until the end. Then stop. *
|> * g4wrw@g4wrw.ampr.org Amprnet * (the king to the white rabbit) *
|> **

Thanks,
73,

| David E. Baker Opinions expressed are |
| Callsign: AB5PI mine, and they do not |
| Internet: debaker@bnr.ca necessarily reflect |
| IP Addr: 47.122.65.7 the opinions of BNR or |
Unix ID: crchh7b0 or Northern Telecom.

1066. bowtie filter

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-10 18:07:33 UTC
From: sscalsk@relay.nswc.navy.mil
Message-ID: <SSCALSK.93Dec10130733@screamer.nswc.navy.mil>
Source record: 50794

Can anybody comment on the effectiveness of the bowtie filter mods for the Universal M7000/M8000/PK232 that WILLCO Electronics sells? Would someone explain a little of the theory behind a bowtie filter as opposed to a conventional filter?

Thanks -= stan sscalsk@relay.nswc.navy.mil

1067. Re: C SOURCE FOR PBBS??

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-10 19:31:24 UTC
From: mike@imcldn.demon.co.uk
Message-ID: <755551884snz@imcldn.demon.co.uk>
Source record: 50887

In article <931209.73944.TGOODIN@delphi.com> TGOODIN@delphi.com writes:

> I am looking for C Sources for any kind of PBBS for Packet that I might
> be able to compile for use in my unix (ATT 3B2) machine.
> Tim

The only one I can think of offhand was an early version of CBBS - If anyone
else knows of something, please let me know, I would be interested too...
--

Michael P Simkins | Programming in COBOL, C, and PASCAL undertaken, Please
G7OBS Software | E-Mail 'software@imcldn.demon.co.uk' to discuss your needs
---
X400 : /RFC-822=mike(a)imcldn.demon.co.uk/O=mhs-relay/PRMD=uk.ac/ADMD= /C=GB/

Amateur : AX25 : G7OBS@GB7DAA.#33.GBR.EU

1068. Re: When will we get digital cellular?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-10 20:18:44 UTC
From: alanb@sr.hp.com
Message-ID: <CHu5r9.4A3@srgenprp.sr.hp.com>
Source record: 50805
Cross-posted to: alt.radio.scanner,rec.radio.scanner,rec.radio.amateur.digital.misc

kevin.jessup (kevin.jessup@mixcom.mixcom.com) wrote:

: ... I am considering the purchase of a cellular phone.

: I know that the current system is FDMA (frequency division multiple
: access) or "analog" cellular and is easily monitored. When will
: digital cellular become the norm? I've heard that 1994 is the
: introductory time frame for initial tests.

: As I understand it, the digital system will use CDMA (code divison
: multiple access) and ALL the channels in a single "cell" will be
: "spread" (as in spread-spectrum) over a range of 1.228 MHz. This
: is certainly NOT equivalent to the existing analog hardware that
: uses narrow-band FM transmission "channels" every 30 kHz.

Digital is certainly coming. It's already being tested in some areas.

FDMA, Frequency-Division Multiple Access, means channelized operation,
one user at a time per channel. That's the way the current analog
cellular system works. (Also nearly all amateur operation.)

CDMA, Code-Division, Multiple Access, is a proposed new digital system
invented by a company called Qual-Com. It's a type of spread-spectrum
transmission where each user's signal covers the entire band. Each
transmitter is coded with a unique digital sequence which allows the
receiver to filter out all the unwanted signals with different sequences.
You theoretically don't get any more users per kHz than with FDMA, but
digital compression, power-control, and other techniques actually allow
many more users to be squeezed into the same spectrum.

While CDMA is making good progress, the "official" standard system
for digital cellular is a type of TDMA, Time-Division Multiple Access.
With TDMA, many users share the same channel, apparently at the same
time. What's actually happening is that the digital signal is speeded
up, so that the bits can be sent much faster than real-time. This
leaves unused transmit time that other users can use. Actually, the
system in use is really TDMA/FDMA, since there are still several
channels in use, albeit with several users per channel.

AL N1AL

1069. Re: X1J at 38.4 kbps

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-10 20:55:42 UTC
From: glenne@sad.hp.com
Message-ID: <CHu7Gv.4uq@srgenprp.sr.hp.com>
Source record: 50888

Since posting the basenote, I've had some very helpful and useful exchanges with Dave Roberts, the author of X1J. In addition, the remote site I mentioned has been visited and the TNC running X1J was replaced with another which has a DCD state machine. Also, several days after vanishing from the band, the remote X1J started functioning, poorly but still working, again.

In considering the differences between the remote X1J and one in the hamshack (allright, it's really the garage) I came to the idea that maybe what was happening wasn't due to the fundamental inability of X1J to run fast enough. Dave's comments substantiated this.

Due to the difference of DCD signals, the remote node had been running full duplex. This required limiting MAXFRAME to one but that was tolerable. I had set the node to FDX in order to ignore the RF derived DCD coming from the radio which in this case can tend to have a lot of edges due to Part 15 and other devices sharing 902-928 MHz. However, the radios are also designed such that RxD is qualified by DCD, even if the TNC ignores DCD, RxD doesn't. With a loosely set squelch and/or lots of fast FH spread spectrum signals there can be a *lot* of edges. With a loose squelch the RxD line is a gated version of what the discriminator sees (which is very noisy with a lot of fast edges in the 500 KHz bandwidth).

I now suspect that the radio squelch was set loose and the radio could probably hear itself weakly (noisey) during transmit. The problem I saw was likely the result of a tremendous number of interrupts from the receive side of the TNC SIO (probably mostly receive aborts or errors of some kind). I expect that the receive interrupts have higher priority than transmit interrupts and consequently the transmit side was able to run out of data to send and reported underruns.

Since replacing the TNC and disabling FDX the excessive number of underruns disappeared and performance has returned to the same level as that of the local X1J boxes. The X1J code does require considerable overhead so performance isn't stellar, but it *does* seem to run now at 38.4 kbps. Ping RTT is about 300 milliseconds. This is way longer than the raw channel rate alone requires but it *does* still allow higher speed data to go through the node and offers remote diagnostics.

Following Dave's advice, I've disabled mheard and nodes broadcasts and will use minqual to effectively disable NET/ROM operation.

So, for anyone else wanting faster operation and KISS in a standalone box for lowcost, X1J still seems viable to 38.4 kbps. I still hope to get a version of K3MC KISS code modified to include digipeating since I

think this might be able to run my radios much faster, perhaps in the 100-200 kbps territory. If this happens before the fullspeed controllers are working properly I'll probably try to get that code installed in the TNCs.

All this is certainly trying to squeeze an underpowered platform, the TNC2, but it is still a lot less expensive than the few alternatives, Gracilis, the German TNC3 and perhaps the Data Engine and presently it is more available than MIO. I think that it points to a general issue though; as we seek higher speeds we will continue to need to handle as much of the "pre-filtering" in hardware as possible. Building radio hardware which has data which is as "qualified" as possible, along with doing FEC in hardware rather than software may be requirements as we push for performance. Picking radio methods (like SS or equalization) combined with fast hardware FEC to provide "host ready" data may be a necessary.

The TNC was originally designed as an interface between a "dumb radio" and a dumb terminal. As we've increasingly run higher levels of complexity, TCP/IP and other networking protocols, we've drifted toward "doing the hard part in the increasingly powerful local host. KISS protocol is an example of this. However, as we turn the speed up, I think many functions like "data cleaning" and FEC if not some of the higher ones like switching/routing may have to be done closer to the physical medium again.

Glenn Elmore n6gn

ax.25 n6gn@wx3k.#nocal.ca.usa.na
amateur IP: glenn@SantaRosa.ampr.org
Internet: glenne@sr.hp.com

1070. WANTED SCHEMATIC TUBE AM RADIO 1955 - 1957

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-10 23:24:53 UTC
From: staley@aud.alcatel.com
Message-ID: <2eb0g6$7f1@rdxsunhost.aud.alcatel.com>
Source record: 50799

In need of schematic for and old 1955 - 1957 Motorola AM radio.
Radio is from a old car that is being restored.

Motorola says its too old and they have no info. Sams
has nothing either.

Anyone who can supply schematic, or information at to
a possible source can call

Cliff Staley 214-996-6403
or send email

Thanks
Cliff Staley

1071. Re: C SOURCE FOR PBBS??

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-11 01:58:49 UTC
From: enge@enge.almaden.ibm.com
Message-ID: <2eb9gp$l81@juniper.almaden.ibm.com>
Source record: 50808

In article <755551884snz@imcldn.demon.co.uk>,
Michael P Simkins <mike@imcldn.demon.co.uk> wrote:
>In article <931209.73944.TGOODIN@delphi.com> TGOODIN@delphi.com writes:
>
>> I am looking for C Sources for any kind of PBBS for Packet that I might
>> be able to compile for use in my unix (ATT 3B2) machine.
>> Tim
>
>The only one I can think of offhand was an early version of CBBS - If anyone
>else knows of something, please let me know, I would be interested too...
>--

It doesn't fit all your requirements but the source code for the AA4RE
BBS is available. Its about 80,000 lines of Borland Turbo Pascal 7.

I think the released version 2.12 source is on the various ftp servers.
The beta versions I hand out personally so you know what you are
getting.

Roy Engehausen, AA4RE
enge@almaden.ibm.com

1072. Scrambler lockup

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-11 05:55:25 UTC
From: ka7oei@uugate.wa7slg.ampr.ORG
Message-ID: <38403@uugate.wa7slg.ampr.org>
Source record: 50746

Here in Utah, we have designed and run some test on a T1 radio modem.

The modem appears to work very well but there is an area of slight concern:
This modem uses a 17 bit maximal-length scrambler (taps on bits 5 and 17).

This scrambler uses the same circuit topography as the scrambler in the GRAPES
modem and uses 2 XOR gates (74HC86) 2 shift registers (2 74HC164's) and
a flip-flop (1/2 of a 74HC74).

The problem seems to be that there some unsusal circumstances (cause unknown)
in which the scrambler seems to get "stuck". Since this sequence generator
is obstensively an open loop system (as opposed to a PN generator used for
Spread Spectrum) I don't see how this should be able to occur, but occur
it can.

Has anyone else had experience with this sort of scrambler and had to deal
with this problem?

Several things come to mind: On could detect the lack of appropriate
transitions and reset the system to get it working once again. One could
also have the system software detect a stoppage of the data and cause a reset
to be issued.

Interestingly enough, the descrambler, which is nearly identical to the
scrambler, does NOT seem to exhibit this sort of behavior.

We will soon be using these modems in a full-duplex T1 microwave link and
will report on their performance.

<Clint>

ka7oei@uugate.wa7slg.ampr.org
clint@uugate.aim.utah.edu

1073. Re: When will we get digital cellular?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-11 09:29:21 UTC
From: winter@apple.com
Message-ID: <2ec3th$s7v@apple.com>
Source record: 50806
Cross-posted to: alt.radio.scanner,rec.radio.scanner,rec.radio.amateur.digital.misc

In article <jschulma.21.000F2EAC@uiuc.edu>,
Jay S. Schulman <jschulma@uiuc.edu> wrote:
>Speaking as someone who has been testing digital for a few months for
>Motorolla, it is not what it is cracked up to be. Don't get me wrong, in a
>few years digital cellular will be what analog is today. But, right now,
>digital sounds terrible! It sounds like you are talking into a cheap computer
>and listening to the playback. Besides heavy hissing and other background
>noice, your voice alone makes it difficult for others to understand you.

Sounds like TDMA cellular is really awful at this point! I tried a
CDMA phone during a test one day and the audio quality was just fine--
even with 50 or 60 other people using the same channel at the same time.

>To anyone considering digital:
>
> Wait. It will get much better in the future.

I guess how far in the future you'll have to wait for decent
quality depends on which type of digital cellular is being
installed in your area. :-)

Patty

--
============================== Patty Winter ==============================
Apple contractor Internet: winter@apple.com
Sunnyvale, California AMPRNet: 44.4.4.50
"What about truth? What about reality?"
"What about the way the old ending tested in Canoga Park?"
================================== N6BIS ==================================

1074. HP 100LX weirdness

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-11 15:41:50 UTC
From: jangus@skyld.tele.com
Message-ID: <755624510snx@skyld.tele.com>
Source record: 50810

Heh, the new HP 100LX is a VERY nice part. It does has one minor problem. The HP Connectivity pack can initiate a remote session by sending a "magic" string of characters to the serial port. No special pre-work must be done at the laptop end of the cable (except plugging it in).

This is fine for thier client server no muss package, but it resulted in a near heart stoppage last night while monitoring packet activity.

Suddenly the display went berserk and finally the unit failed to reboot or do anything other than sit there. It also made the internal card modem go though some weird sounding activities as well.

Oh no! I've just killed my new $1000 toy. Arrrrghhh. "Put a fork in me Moma, I'm done!"

OK, I took out the lithium battery and the two alkalines and let it sit for about an hour. Put it all back together and prest, back to life.

Now for the clue. I noticed that on receiving a netrom broadcast, the screen would echo "HP model 100LX" or something to that effect. The TNC of course had a hard time dealing with that.

Any comments on this? Anyone know what the magic phrase is to launch the HP connectivity sessions?

73 es GM from Jeff (whos heart rate has finally returned to normal.)

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "It is difficult to imagine our
Internet: jangus@skyld.tele.com | universe run by a single omni-
US Mail: PO Box 4425 Carson, CA 90749 | potent god. I see it more as a
Phone: 1 (310) 324-6080 | badly run corporation."

1075. Minisport Laptop Hacker - Vol 18

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-11 21:27:28 UTC
From: bmork@opus-ovh.spk.wa.us
Message-ID: <HgXeec1w165w@opus-ovh.spk.wa.us>
Source record: 50809
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.packet

MiniSport Laptop Hacker - Vol 18, Dec 1993
To discourage pecuniary interests, Copyright (c) 1993 Brian Mork

>>> ADMIN
Remember, you can get copies on disk of any software or text file I refer to (including the MLHacker series) by sending me a disk and SASE. I'll put a variety of other MLHacker related goodies on there, too. MLHacker is available on the KA6ETB Internet HAM-Server. Send a message to ham-server@grafex.cupertino.ca.us with the single line of text: HELP to get access information. Check the \hamradio\newsletters directory. If you're comfortable with late-night long distance phone calls, you may download MLHacker related stuff directly from me at 509-244-9260. Use the FILES command, and L)og into the \public\computer directory. Standard XMODEM and YMODEM protocols are available. ARO related CD-ROM, Internet e-mail, and Usenet newsgroups are also available from this free service.

>>> POWER SUPPLY
Nothing, I repeat nothing, beats a schematic diagram when fixing electrical equipment. No fancy test equipment can compare. Thank you big time, Brian, for 1) recognizing my reverse engineered attempt (see Vol 17), and 2) sending me the real schematic! Two hours later... I have a dead n-channel enhancement-mode MOSFET ("K612" in case anybody can offer a cross reference). There's a 7V p-p, 500 KHz square wave arriving at the gate. The intent is that the drain pulls current through a switching power supply transformer primary. Wasn't happ'ning. Drain stays at the +V supply voltage. Comparing with another K612 that handles the electroluminescent screen voltages confirms the first one is not working.

Several parts houses couldn't identify the K612 part, so I made a trip to Radio Shack and picked up a 276-2072 IFR510 n-Channel MOSFET. It's about twice as big as the K612, and its specifications are an over-kill, but it's all I had available. It cost just over $2.00. Instead of mounting it as a surface mount on the bottom side of the circuit board, I layed it sideways between some capacitors on the top of the circuit board and ran hookup wire to the bottom side of the board for connections. Everything works fine! A representation of the power supply pinout given in Vol 5 is in order. This time, I know functionality, too.

With the bottom of the computer removed, the motherboard still in place, pin 1 is toward the right and front of the computer, numbered like this:

15 13 11 9 7 5 3 1
16 14 12 10 8 6 4 2

1 5 V backup supply #1, 10-300 mA
2 BACKUP-ON request from computer, TTL levels
3 Ground (backup power supplies)
4 5 V backup supply #2, 10-45 mA
5 VEE-ON request from computer, TTL levels
6 -22 V (Vee), 10mA
7 +10 V, 10 mA
8 -10 V, 10 mA
9 EL-ON (LCD screen) request from computer, TTL
10 Li Battery +V input to power supply (~6.3 V)
11 Ground (Li battery circuits)
12 POWER-ON request from computer, TTL levels
13 Ground (hi current return from pins 15/16)
14 Duplicates Pin 13
15 5 V (Vcc), 0.25-0.6 A)
16 Duplicates Pin 15

A note of caution is in order. The computer will automatically shut down if certain voltages don't come up to specs within a few seconds (this appears as a 2 second blink of the power and numlock LEDs and the screen). Requests from the computer can be deceiving unless you know what you're looking at. For instance, I repeatedly measured Pin 9 at zero volts during my debugging. I thought the computer was erroneously not asking for the screen voltages. In fact, right when I pushed the power button, it came high for a few seconds, and then shut back off. It !was! working ok. Pin 12, on the other hand, went high to 5+ volts and then dropped back to 4.7 volts as the main 5 V supplies were shut down. This pin kept the request (4.7 volts is TTL high) active, and only dropped back to zero when I pressed the power switch once again, telling the computer to shut "off". Realize if there are good NiCads, good Li batteries, or the external charger is plugged in, this computer never really shuts totally off.

There are three main sections to the power supply. The first handles all the 5 Volt supplies. Both batteries are brought in to this section and the normal computer supply and the backup voltages are provided from this circuitry. If pins 1, 4, 15, or 16 are bad at the power supply header, this section is malfunctioning.

The second section is where my trouble occurred. An integrated circuit regulator provides oscillation signals for the switching converter and appropriate voltage feedback control. A three-tapped transformer followed by diode rectification provides +10v, -10v and -22v. If pins 6, 7, or 8 are not at correct voltages, suspect problems in this area.

The last section is associated with the electroluminescent screen voltages, and has its own 6-pin header. To see it, open up your Minisport using the directions in MLH Vol 5 and find the 6-pin jumper going from the power supply board into the display pivot joint. Only 4 wires are used. One handles ground. Two carry current to/from the brightness

control, and one is the high voltage drive for the display. Specifically:

6 50-150 VAC p-p, nominally 138 VAC
5 n/c
4 GND
3 n/c
2 return from 20 Kohm brightness control
1 diode rectified 10 VDC going to brightness control

If pins 1 or 6 !of the screen connector! are at incorrect voltages, suspect problems here. Incidentally, Pin 9 of the motherboard power supply connector (see MLH Vol 5 and Vol 17) is a TTL level request from the computer to turn the electroluminescent display on. It goes into Pin 14 of the MB3778. The MB3778 oscillator output is buffered through three parallel CMOS gates and toggles the gate of a K612 MOSFET, which in turn pulls current through a transformer. Subsequently, a high voltage step up transformer (looks like a telephone line isolation transformer) generates the high VAC for the screen.

Packing tape applied on the front and sides of the keyboard worked well to bundle the keyboard to the motherboard as I worked on the assembly. Without this, the keyboard connector ribbons get severely strained as the board is flipped this way then that way.

I am growing to dislike auto-routed circuit boards. The computer logic generates through-the-board vias that terribly confuse a person trying to trace the circuitry. In a lot of cases, casual inspection shows single side alternative routes were available.

>>> BAD ROM DISK
I received a message over Internet from a Minisport user that indicated his ROM disk (C:) has gone dead. He's getting checksum errors on boot-up. Do you have the equipment and willingness to pull your ROM, make a copy and send it on to Ron? I ask this not just for one user, but everyone else this will eventually happen to. The source for original ROMs has dried up, and if we're going to keep Minisports working, it would be good to know who could do this for others.

>>> MEMORY SWAPS
The first MB of memory on a ZL-2 is eight discrete chips soldered on the motherboard. The second MB is a SIPP package. I know from experience the 2nd MB can be unsoldered and swapped into a ZL-1. Thomas asks if the lower and upper MB are interchangeable. Unfortunately, no. However, I would be interested in soldering a standard PC SIPP into my ZL-1 and see if the graft takes. Do you have an unused 1 MB SIPP you'd be willing to let me use?

Please provide feedback: * BBS 1-509-244-9260
* AX.25 KA9SNF@wb7nnf.#spokn.wa.usa
* Internet bmork@opus-ovh.spk.wa.us
73, Brian * 6006-B Eaker, Fairchild, WA 99011

Brian Mork Internet bmork@opus-ovh.spk.wa.us (BBS 509-244-9260)
. . . .. Amateur Radio (AX.25) ka9snf@wb7nnf.#spokn.wa.usa
... . . USMail 6006-B Eaker, Fairchild, WA 99011

1076. F6FBB Mailing List

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-12 23:17:56 UTC
From: david@stat.com
Message-ID: <L9wgec1w165w@stat.com>
Source record: 50762

Welcome!
You have joined the f6fbb-list@stat.com The purpose of this server is
to provide Sysops and Networkers with tricks/tips/help and new software
updates concerning the F6FBB bulletin board system. Exchange of UUENCODED
files through the server is ok, however, please limit the size of each file
cut to 700 lines. Your Sysop for the server is Daniel J. Meredith,
(n7mrp@n7mrp.az.usa.na), (dan@aznet.stat.com).

To Send Mail To Be Distributed To All Subscribers:

f6fbb-list@stat.com

And Send Normal Subject And Text.

To Remove Yourself From This Server, Please Send Electronic Mail To:

listserv@stat.com

And Include The Command:

Unsubscribe f6fbb-list

As The First Line of Your Message.

To Add Yourself To This List, Please Send Electronic Mail To:

listserv@stat.com

And Include The Command:

subscribe f6fbb-list

As The First Line of Your Message.

Requests For Help Should Be Sent To:

f6fbb-list-request@stat.com

The F6FBB Server has been established to help Sysops and Networkers alike, in
providing help and information in a timely manner. Sharing of software and
other miscellaneous information via the server is quite alright.

Daniel J. Meredith
Arizona Packet Coordinator

Voice/Data = (602) 956-2566
Ax.25 = n7mrp@n7mrp.az.usa.na
Internet = dan@aznet.stat.com

Editor, HICNet Medical Newsletter
Internet: david@stat.com FAX: +1 (602) 451-6135
Bitnet : ATW1H@ASUACAD

1077. PBBS Bulletin Forwarding Mailing List

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-12 23:18:44 UTC
From: david@stat.com
Message-ID: <X0wgec2w165w@stat.com>
Source record: 50763

Welcome!
You have joined the bull-fwd@stat.com The purpose of this server is
to provide Sysops and Networkers a server in which to forward bulletins
and also discuss forwarding problems and obtain forwarding partners.
This server is also for the exchange of general information relevant
to all Amateur Related PBBS software packages available today...

Please use UUENCODING and PKZIP your bulletins when using the server.
Please limit the UUENCODE to 700 Lines...

Your Sysop for the server is Daniel J. Meredith,
(n7mrp@n7mrp.az.usa.na), (dan@aznet.stat.com).

To Send Mail To Be Distributed To All Subscribers:

bull-fwd@stat.com

And Send Normal Subject And Text.

To Remove Yourself From This Server, Please Send Electronic Mail To:

listserv@stat.com

And Include The Command:

Unsubscribe bull-fwd

As The First Line of Your Message.

To Add Yourself To This List, Please Send Electronic Mail To:

listserv@stat.com

And Include The Command:

subscribe bull-fwd

As The First Line of Your Message.

Requests For Help Should Be Sent To:

bull-fwd-request@stat.com

Daniel J. Meredith
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Internet = dan@aznet.stat.com

Editor, HICNet Medical Newsletter
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Bitnet : ATW1H@ASUACAD

1078. Re: ATM on Amateur Radio?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-13 02:12:49 UTC
From: Carl Makin <makinc@hhcs.gov.au>
Message-ID: <1993Dec13.121249.848@hhcs.gov.au>
Source record: 50812

In article <2dgp2j$s68@vixen.cso.uiuc.edu> Andy Peterson, peterson@ux1.cso.uiuc.edu writes:

> It was my understanding that since ATM does not include any frame sequencing
> information, using it on a radio link raw would be non-advantageous at best,

Correct.. ATM has NO sequencing information, is it also NOT a reliable
transport. In the world of Voice and Video comms dropping a few cells
here and there is of no real consequence.

> since if a packet was lost it could not be recovered. Do I understand this
> right? I was under the impression that ATM's main purpose is a standard for
> encapsulating information inside other error-correcting frames such as X.25

ATM is another L2/L3 protocol running, roughly, at the same level
in the ISO stack as AX.25/X.25, Ethernet, Token Ring etc.

Carl.
--
Carl Makin (VK1KCM) "Speaking for myself only!"
makinc@hhcs.gov.au (Internet) / vk1kcm@vk1kcm.act.aus.oc (Packet Radio)
'The best book on programming for the layman is "Alice in Wonderland";
but that's because it's the best book on anything for the layman.'

1079. MSYS 1.16 Release

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-13 03:16:28 UTC
From: sww@csuohio.edu
Message-ID: <1993Dec13.031628.27696@news.csuohio.edu>
Source record: 50761

SB SYSOP @ ALLUS < WA8BXN $16603_WA8BXN
MSYS 1.16 now available
R:931212/1722 16603@WA8BXN.#NEOH.OH.USA.NA

Hello All - The disks went in the mail on Friday for those to whom I owed
disks. IMPORTANT NOTE: The RLI compatible compressed forwarding is still
in alpha test state. It has bugs. DO NOT USE IT LIVE! I do need a station
who forwards on vhf to a real RLI system to help with the tests (preferably
one with complete internet access [mail and ftp]). New in this release:
Improved user interface
Pactor support
Forwarding to FBB systems via modem
Dumb terminal command for ports
User passwords works
Ability to put bid on R: line

There are three disks which contain these files:
MSYS116.EXE required executables and data support files
MOPT116.EXE documentation files
MSYSB116.EXE bbs only version of MSYS, contributed files, source for scan tsrs

These files are available free on Cleveland Hamnet (216-942-6382 300-14400 baud)
Also on internet anonymous ftp at coffman.csuohio.edu 137.148.21.6
They are also available from me at $5 per disk (covers disk, mailer and postage)
to US addresses, $10 per disk to foreign addresses via airmail. Or for current
release only, send formatted disk(s) and sase mailer.

Happy holidays to all! 73 - Mike WA8BXN @ WA8BXN.OH.USA or via internet
map @ cis.csuohio.edu

/EX

1080. Re: F6FBB Mailing List

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-13 04:50:27 UTC
From: luru@stekt6.oulu.fi
Message-ID: <LURU.93Dec13065027@stekt6.oulu.fi>
Source record: 50807

In article <L9wgec1w165w@stat.com> david@stat.com (David Dodell) writes:
> Welcome!
> You have joined the f6fbb-list@stat.com

Has F6FBB himself access to the list?

Luru

1081. Packet radio beginner question

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-13 06:23:17 UTC
From: koberg@spot.Colorado.EDU
Message-ID: <CHyn2t.D2D@cnsnews.Colorado.EDU>
Source record: 50814

Hi. I'm trying to get into packet radio, but know not too much about it.

I'm trying to go the cheap route, so I got the schematics for the Baycom modem using the TCM3105, and Baycom 1.5 software.

My question is, what frequencies are normally used for packet radio at 1200 baud (that is what the Baycom modem is at right)?

My radio is 2 meter, but I understand some transmissions are in the FM range. Is 2 meter for 9600 and FM for 1200/300? Lemme know, so I'll know whether to build this or not.

Plus, are there any more schematics out there for a better modem than this? Perhaps some with DCD? Any usual schematics format (preferably schema) or even a PS file would be nice.

The faq failed to mention any relevant info on any of these topics...or any anon. ftp sites for that matter.

What other software can I use the Baycom modem with?

Email or post replies

koberg@spot.colorado.edu

1082. Re: F6FBB Mailing List

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-13 07:52:19 UTC
From: david@stat.com
Message-ID: <w2kHec4w165w@stat.com>
Source record: 50811

luru@stekt6.oulu.fi (Ari Husa) writes:

> In article <L9wgec1w165w@stat.com> david@stat.com (David Dodell) writes:
> > Welcome!
> > You have joined the f6fbb-list@stat.com
>
> Has F6FBB himself access to the list?

He can have access to it, but I do not know his internet account so
don't know if he is on it himself. I'm not an active participant, just
maintain the list on my machine.

david

Editor, HICNet Medical Newsletter
Internet: david@stat.com FAX: +1 (602) 451-6135
Bitnet : ATW1H@ASUACAD

1083. Assigning NL-calls for packet radio in the Netherlands???

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-13 08:42:10 UTC
From: vandeput@ebe.eb.ele.tue.nl
Message-ID: <2eh9t2$sca@tuegate.tue.nl>
Source record: 50816

Fellow packeteers,

Recently I came across a number of postings on a local (packet radio) BBS that urged everybody to subscribe for an official NL-callsign. The use of such a (rather confusing) uniform way of naming packet stations is still unclear to me.

In a discussion with another packeteer (who just made up his own NL-call) I heard that the request for such callsigns were forwarded through the university of Leiden via the Internet to the USA. After 'official registration' the callsigns are then returned to the Netherlands and the requesting CB-er receives his own 'official' callsign. Curious if I could find the person responsible for the forwarding to the USA I called a friend (who happens to be a network administrator at the University of Leiden) and asked him to see if anybody there knew about it. Unfortunately he hasn't been able to find whoever it is that seems to know all about this practice...

As I still don't know the reality nor the use of the NL-calls I would like to hear from anybody who knows more about the subject. My Internet (and packet) address is given below.

73's de Timo

Name : Timo van de Put
Internet: vandeput@eb.ele.tue.nl
packet : TP0BRD @ MN0BBS (N.Brabant, Nederland)

1084. Re: F6FBB Mailing List

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-13 15:59:23 UTC
From: enge@enge.almaden.ibm.com
Message-ID: <2ei3gr$k9f@juniper.almaden.ibm.com>
Source record: 50813

As far as I know, F6FBB has no access to Internet. He has made no
public contributions to the proposed standard that I can remember.

Roy Engehausen, AA4RE
enge@almaden.ibm.com

1085. Re: COMPLETE Documented NOS Wanted

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-13 19:30:14 UTC
From: jra@lawdept.daytonoh.ncr.com
Message-ID: <jra.32.000E816B@lawdept.daytonoh.ncr.com>
Source record: 50818

In article <9312012304.tn22729@aol.com> <mattharvey@aol.com> writes:

>I would like to know how I could attain a copy of the latest version of KA9Q
>unmodified NOS. I would appreciate it if I could find a package with complete
>documentation that includes the file BM.EXE. Please send responses to
>MattHarvey@aol.com OR KD4AZH@KB4GBS.#TPA.FL.US.NOAM.

About 18 months ago I wrote a document called IntroNOS (not to be confused with Ian's NOSIntro!!!) that's about a 35 page into to configuring and using NOS as an end-user system. It's based on the N1BEE version of PA0GRI NOS, and unfortunately I haven't had time to update it against the newer versions, but the info is still basically valid.

It covers configuration and basic operation (ftp, telnet, setting up mail, etc.) with the assumption you know a bit about packet, but nothing about NOS or TCP/IP.

It's available from ucsd.edu as hamradio/packet/tcpip/doc/intronos.zip. It's also in the packet radio library of Compu$erve under a slightly different name due to their silly filename restrictions -- something like INTNOS.ZIP, I think.

You might find it helpful.

73,
John Ackermann AG9V
jra@lawdept.daytonOH.ncr.com

1086. Re: Packet radio beginner question

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-13 20:16:37 UTC
From: alanb@sr.hp.com
Message-ID: <CHzpnp.8Fx@srgenprp.sr.hp.com>
Source record: 50817

Allen Koberg (koberg@spot.Colorado.EDU) wrote:

: My question is, what frequencies are normally used for packet radio at
: 1200 baud (that is what the Baycom modem is at right)?

: My radio is 2 meter, but I understand some transmissions are in the
: FM range. Is 2 meter for 9600 and FM for 1200/300? Lemme know, so
: I'll know whether to build this or not.

OK, I think I understand your confusion. Although "AM" and "FM" are commonly used to refer to different broadcast band frequency ranges, in fact AM and FM are modulation types, not frequency bands. You could put an FM transmitter in the AM broadcast band and vice versa (although it would be illegal, of course.)

FM is one of the commonly used modes on the amateur 2 meter band, and is the one normally used for packet. Most operation is at 1200 baud, although faster speeds are becoming available. Around here, the most popular frequencies are 144.91, 144.93, 144.95, 144.97, 144.99 and 145.01, 145.03, 145.05, 145.07, 145.09.

Packet is also used on the amateur shortwave bands, using SSB (single sideband) transmitters/receivers and 300 baud.

AL N1AL

1087. Re: COMPLETE Documented

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-13 21:29:12 UTC
From: Burt.Kaufman@f40.n382.z1.fidonet.org
Message-ID: <755830867.AA00259@afarm.uucp>
Source record: 50747

-=> Quoting M. Knell to All <=-

MK> Hi folks, you might like to know that I'm currently working on a
MK> (relatively brief) guide to getting up and running with NOS,
MK> provisionally entitled 'NOS for Dummies'. This may change :-)

MK> It won't cover nearly as much in depth as Ian's book, but
MK> should be able to help with the basics of starting up. It'll be
MK> freely available as TeX source or Postscript.
As long as you've already got it in Word format, why not make it
available in that form as well? I can't afford a PostScript
printer, no longer have access to TeX. (And Word for Windows
produces fine output on cheap printers using TrueType.)

Thanks!

Burt N5SYY

... "I often quote myself; it adds spice to my conversation." G. B. Shaw
___ Blue Wave/QWK v2.12

1088. Re: HP48 Communications

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-13 23:02:43 UTC
From: weisen@alw.nih.gov
Message-ID: <1993Dec13.230243.12358@alw.nih.gov>
Source record: 50819

Scott Jann (jann0004@maroon.tc.umn.edu) wrote:
: I am looking for a cheap way to communicate between two HP-48 calculators
: (longer than the build in IR can do), maybe 50-100 feet. I have heard of

Let me guess.....it needs to be done by the time final exams roll around,
right?

;-)

--
Neil Weisenfeld, Computer Engineer Internet: weisen@alw.nih.gov
Nat'l Insts. of Health, 12A/2033 UUCP: ...!uunet!nih-csl!weisen
Bethesda, MD 20892 Voice: 301/402-4030

1089. Re: Packet radio beginner question

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-13 23:31:19 UTC
From: wy1z@splinter.coe.northeastern.edu
Message-ID: <WY1Z.93Dec13183119@splinter.coe.northeastern.edu>
Source record: 50820

In article <CHyn2t.D2D@cnsnews.Colorado.EDU> koberg@spot.Colorado.EDU (Allen Koberg) writes:

Newsgroups: rec.radio.amateur.digital.misc
Path: lynx!noc.near.net!saturn.caps.maine.edu!dartvax.dartmouth.edu!news.bu.edu!olivea!hal.com!decwrl!sdd.hp.com!vixen.cso.uiuc.edu!howland.reston.ans.net!pipex!uunet!boulder!cnsnews!spot.Colorado.EDU!koberg
From: koberg@spot.Colorado.EDU (Allen Koberg)
Sender: usenet@cnsnews.Colorado.EDU (Net News Administrator)
Nntp-Posting-Host: spot.colorado.edu
Organization: University of Colorado, Boulder
Date: Mon, 13 Dec 1993 06:23:17 GMT
Lines: 25

Hi. I'm trying to get into packet radio, but know not too much about it.

I'm trying to go the cheap route, so I got the schematics for the Baycom modem using the TCM3105, and Baycom 1.5 software.

My question is, what frequencies are normally used for packet radio at 1200 baud (that is what the Baycom modem is at right)?

My radio is 2 meter, but I understand some transmissions are in the FM range. Is 2 meter for 9600 and FM for 1200/300? Lemme know, so I'll know whether to build this or not.

On the 2m band, the standard baud rate is 1200. Hams are beginning to experiment with 2400 baud on this band, too.

On the 1.25m and 70cm bands, the baud rate can increase dramatically, provided you have the modem to work at those baud rates.

Plus, are there any more schematics out there for a better modem than this? Perhaps some with DCD? Any usual schematics format (preferably schema) or even a PS file would be nice.

The faq failed to mention any relevant info on any of these topics...or any anon. ftp sites for that matter.

What other software can I use the Baycom modem with?

I'll let others on the net answer the rest of the questions.

Email or post replies

koberg@spot.colorado.edu

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==========

```
| Scott Ehrlich Internet: wy1z@neu.edu |
| Amateur Radio: wy1z AX.25: wy1z@k1cf.ma.usa.na |
|-------------------------------------------------------------------------|
| Maintainer of the Boston Amateur Radio Club hamradio FTP area on |
| the World - world.std.com pub/hamradio |
===========================================================================
```

1090. Re: Packet radio beginner question

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-13 23:50:58 UTC
From: framenet@risc1.rug.nl
Message-ID: <CHzzKz.JIs@risc1.rug.nl>
Source record: 50822

From another beginner the following questions:

What is needed to broadcast data at high speed over FM? How fast can you go and can you use "normal" modems, or i.e. a Telebit Trailblazer.

What does the receiver need?

I know nothing about this world but I'm really interested in the possibility of sending data over wireless connections to different places simoultaneous.

If you can't use normal modems, what are these radio modems and how fast do they go? Any brands?

Many thanks in advance for your answers.

Dimitri Georganas
framenet@risc1.rug.nl

1091. 9600 baud question

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-14 00:08:46 UTC
From: "Robert L. Metcalf NV1A" <RLM@MAINE.MAINE.EDU>
Message-ID: <93347.190846RLM@MAINE.MAINE.EDU>
Source record: 50821

I am buying a Kenwood TM401B 440 MHz rig from someone. I was wondering what would have to be modified (if anything) on this rig to run packet at 9600 baud? Has anyone had any experience doing this?

The TNC I have is an MFJ TNC (model 1270? I cant remember...) and I am thinking about getting the 9600 baud external modem for it. Does anyone have any experience with this modem?

73,
Rob NV1A
rlm@maine.maine.edu

1092. Anyone modified an IC-22A for 9600 ???

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-14 09:02:55 UTC
From: ian@g3nrw.demon.co.uk
Message-ID: <755859775snz@g3nrw.demon.co.uk>
Source record: 50823

Subject says it all I have an ageing IC22-A which might just do for 9600.
Can you help?

73

Ian, G3NRW

-
+---------------------------------+--+
Ian Wade	e-mail: ian @ g3nrw.demon.co.uk
7 Daubeney Close, Harlington,	AMPRnet: g3nrw.ampr.org [44.131.5.147]
Dunstable, Beds, LU5 6NF, UK.	AX.25: G3NRW @ GB7BIL.#27.GBR.EU
+---------------------------------+--+

1093. TM211 and 9600

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-14 14:16:01 UTC
From: yono@donald.cc.utexas.edu
Message-ID: <2ekhr1$q52@donald.cc.utexas.edu>
Source record: 50825

Sorry if this is a FAQ:

how to use Kenwood TM-211A with G3RUH 9600bps modem ?
I need to know where to inject and retrieve the signal.

Thanks

73 de Paulus N5SNN

--
Paulus Suryono Adisoemarta Internet: yono@ccwf.cc.utexas.edu
Petroleum Engineering Dept. paulus@nextdown.pe.utexas.edu (NeXT!)
U of Texas, Austin yono@gnu.ai.mit.edu
Phone: (512) 471-9628 PBBS: N5SNN @ N5LJF.#AUS.TX.USA.NA
Radio: n5snn or yg1qn AMPRnet: n5snn@ausgw.ampr.org

1094. Best low-cost WEFAX SW/HW

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-14 14:20:00 UTC
From: turini@gdls.com
Message-ID: <2eki2g$1p5@gdls.com>
Source record: 50824
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.misc

I'd like to explore Weather FAX at a reasonable cost. I noticed several commercial packages around $100 or so (AEA, SSC, etc) and one shareware with a homebrew interface.

Does anyone have any recommendations as to the best way to go. I would like to keep the cost less than $150, as that's all my dog has saved up for my Christmas present :-)

Thanks

Bill

1095. Re: Packet radio beginner question

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-14 15:56:33 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1993Dec14.155633.3485@ke4zv.atl.ga.us>
Source record: 50771

In article <CHzzKz.JIs@risc1.rug.nl> framenet@risc1.rug.nl (FrameNet BV) writes:
>From another beginner the following questions:
>
>What is needed to broadcast data at high speed over FM? How fast can you go
>and can you use "normal" modems, or i.e. a Telebit Trailblazer.

We covered this somewhat a couple of weeks ago. The limit is basically
one of regulations in the US. 19.6 kb, or 20 kHz depending on code, is
the limit on our 2 meter band. At 222 MHz and 440 MHz, the limit is 56 kb,
or 100 kHz for unspecified codes. Above those bands, the limit is merely
that the emissions be kept within the band edges. Non-US amateurs have
to comply with their own government's regulations which may differ from
those in the US.

Now ordinary voice grade FM is not the optimum modulation method for
high speed data. Special FSK encodings, such as PSK, QPSK, MSK, etc
are normally used for higher speeds than 1200-9600 baud. This in general
means dedicated radio equipment. At 1200 baud, amateurs use the Bell 202
standard through ordinary voice grade radios, and it won't interoperate
with ordinary telephone modems. For higher speeds, telephone modems depend
on the full duplex nature of the telephone network and on training sequences
to establish their links. This doesn't generally work for amateur radio
since we normally don't run nailed up full duplex links. Instead we
operate on a shared channel in half duplex. So different techniques
are required.

>What does the receiver need?

Aside from normal receiver type things like sufficient sensitivity and
freedom from intermod, data receivers also generally need a flatter
bandpass with better group delay characteristics than voice radios
offer. Having an output that tracks down to DC is also useful if the
modulation has a DC component as some do, such as raw NRZI.

>I know nothing about this world but I'm really interested in the possibility
>of sending data over wireless connections to different places simoultaneous.
>
>If you can't use normal modems, what are these radio modems and how fast do
>they go? Any brands?

While you can use just a simple modem, like the Baycom, and do all the
protocol work in software on the computer, there is a channel and data
protocol that you have to observe, and traditionally this has been implemented
in a hardware and firmware device called a TNC, though there are now special
high performance plugin PC cards as well. This engine is responsible
for observing channel access control, you must avoid transmitting on top

of other users, and for the AX25 data exchange link protocol which does the error checking and acknowledging of the ARQ protocol, handles user addressing issues, and keeps frames in sequence if they have to be resent. So a TNC has two functions, it's a protocol engine, and it generally has a built in modem for the default amateur speeds, 300 and 1200 baud. Better TNCs also have provision for an external modem of more advanced character. This is what people mean when they talk about the presence of a TAPR modem disconnect header. You can purchase modems that do 2400 baud, by default this is the Kantronics modem, and modems that do 9600 baud, either K9NG or G3RUH style modems, off the shelf from several vendors. There are also faster modems such as the GRAPES 56kb RF modem system which is the modem and the radio in one, necessary because of the special MSK modulation it uses. And there are data radios that can be used for direct FSK at 19.2 kb, IE Kantronics D4-10.

An important issue with the higher speed modems is what others in your area are using. While 1200 baud modems are universal because they are built into most TNCs, the faster modems obviously need compatable modems on the other end in order to function. No currently available modem system will automatically negotiate a common speed between two users with different equipment. So unless you want to talk only to yourself, you have to go with what at least one other operator in your range is doing.

Gary
--
Gary Coffman KE4ZV | I kill you, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | You kill me, | uunet!rsiatl!ke4zv!gary
534 Shannon Way | We're the Manson Family | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -sorry Barney |

1096. Help! 9600 baud info needed!

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-14 16:56:30 UTC
From: debaker@bnr.ca
Message-ID: <2ekr7u$al@crchh7b0.bnr.ca>
Source record: 50826
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I am trying to get a radio modified for 9600 operation, but so
far I haven't been able to get very much information. I am
using a Kenwood TM-742A, and would like to run it at 9600. If
anyone (preferably someone with a modified 742) knows how to
do this, please email or post here, or packet mail at
AB5PI@N5LDD.#DFW.TX.USA.NA

Thanks,


```
-------------------------------------------------------------
| David E. Baker Opinions expressed are |
| Callsign: AB5PI mine, and they do not |
| Internet: debaker@bnr.ca necessarily reflect |
| IP Addr: 47.122.65.7 the opinions of BNR or |
| Unix ID: crchh7b0 or Northern Telecom. |
|-----------------------------------------------------------|
```

1097. Alinco DR-430 Extended TX modification.

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-14 19:05:49 UTC
From: postmaster@asarin.ORG.AR
Message-ID: <gate.esokec1w165w@asarin.org.ar>
Source record: 50827

SB ALINCO @ WW $DR430.TX
DR-430 Extended TX mod.
This is the Alinco DR-430 Extended TX modification. This modification will expand TX coverage to 403-499 MHz. Please follow the steps and do the work CAREFULLY! This modification works great in my rig and I assume this modification will work on almost all 430's (no warranty implied).

1) Unscrew the 3 small screws on the top cover.

2) Gently remove the top cover.

3) Cut the little loop wire (blue) that's located just behind the display, 2" left from the Power button.

4) Reassemble the radio.

5) Reset the radio's CPU by turning power ON while pressing the F key.

PRESTO !!

73's & DX de Eduardo "Ed" Sweet - LU7AKC.

Packet radio: lu7akc @ lu7akc.#col.cf.arg.soam
lu7akc @ KO23
Internet: postmaster@asarin.org.ar
/EX

1098. Alinco DR-430 9600 Bps modification.

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-14 19:33:32 UTC
From: postmaster@asarin.ORG.AR
Message-ID: <gate.L3Pkec1w165w@asarin.org.ar>
Source record: 50828

SB NET9K6 @ WW $DR430.9K6
Alinco DR-430 & 9600 Bps
This is the Alinco DR-430 9600 Bps modification. This modification will allow the use of a G3RUH/NB96 9600 Bps packet radio/satellite modem. Please follow the steps and do the work VERY CAREFULLY as this rig uses SMC technology! This modification works great in my rig and I assume that it will work on almost all 430's (no warranty implied).

1) Unscrew the 3 small screws on the top cover.

2) Gently remove the top cover and unplug the speaker connector.

3) Remove the bottom cover by unscrewing the 3 small screws.

4) Remove the VFO, VOL and SQL knobs from the front panel.

5) Carefuly remove the front panel's plastic cover.

6) Unscrew the 3 small screws that hold the front panel board attached to the main board.

7) Pull out gently the front panel's board.

8) Locate pin #2 of the microphone connector and solder a small wire to it (this will be the PTT wire).

9) Remount the front panel's board and screw the 3 small screws.

10) Carefully remount the front panel's plastic cover and place the 3 knobs in their proper positions.

11) In the main board (bottom side) locate the TK10487M chip.

12) Solder the inner conductor of an RG-174 coaxial cable to pin #11 (this will be the Audio-to-modem wire).

13) Locate the CN302 connector (just under the other's side shielding).

14) Solder the inner conductor of an RG-174 coaxial cable to pin #1 (this will be the Audio-from-modem wire).

15) Solder a wire to pin #2 (ground).

15) Very carefully drill a 1/4" hole on the radio's back, just near the SP.OUT connector and pass through it all the new wires.

16) Reassemble the radio.

17) Connect the new wires to the modem and adjust it to properly handle the signal levels.

NOTES:

A) The Audio-to-modem signal level is lower than the one you can get from a Yaesu FT-736r.

B) The Audio-from-modem signal feeds the varactor diode (D303) through a 47K resistor (R324) so you must adjust the modem's output to provide enough signal level to drive the varactor properly.

PRESTO !!

73's & DX de Eduardo "Ed" Sweet - LU7AKC.

Packet radio: lu7akc @ lu7akc.#col.cf.arg.soam
lu7akc @ KO23
Internet: postmaster@asarin.org.ar
/EX

1099. Host Software Choices

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-14 20:48:02 UTC
From: biocca@csg.lbl.gov
Message-ID: <36069@dog.ee.lbl.gov>
Source record: 50772

I'm considering upgrading my PC Host software for the PK232. What programs are popular, and what are their strengths and weaknesses? I've been using simple terminal emulation programs up to now. I may give a shot at the January RTTY roundup, so one question is how do these programs work in a contest environment?

Thanks,

Alan
WB6ZQZ
AKBiocca@lbl.gov

1100. paKet program wanted

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-14 21:24:33 UTC
From: jkbe@cbnewse.cb.att.com
Message-ID: <CI1nH4.BxL@cbnewse.cb.att.com>
Source record: 50829

Can someone give me an ftp location for the shareware program called
paKet?

Thanks,
John

1101. Software suggestion for MFJ-1278?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-14 21:45:46 UTC
From: ve1dln@nbnet.nb.ca
Message-ID: <ve1dln.99.0@nbnet.nb.ca>
Source record: 50773

A friend recently picked up a used mfj-1278. Can anyone suggest a good software package with many bells and whistles that will work with this tnc?

Thanks,
Andy
VE1DLN

1102. 4800 AND 9600 BAUD ???

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-14 23:17:34 UTC
From: epabmg@eds.ericsson.se
Message-ID: <1993Dec15.011734.1@eds.ericsson.se>
Source record: 50832

Hi,
I was wondering what type of modulation methods are
used in packet for 4800 and 9600 data rates ?

Do they use AFFSK, FSK, PSK ETC... and what tones frequencies etc ??

Are there any ciruit diagrams of 4800 and 9600 modems kicking around, if I
wanted to build one ??

thanks and se ya later
John.

email : epajgz@epa.ericsson.se

1103. 4800 AND 9600 BAUD ??

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-14 23:31:49 UTC
From: epabmg@eds.ericsson.se
Message-ID: <1993Dec15.013149.1@eds.ericsson.se>
Source record: 50831

Hi,
I was wondering what type of modulation methods are
used in packet for 4800 and 9600 data rates ?

Do they use AFFSK, FSK, PSK ETC... and what tones frequencies etc ??

Are there any ciruit diagrams of 4800 and 9600 modems kicking around, if I
wanted to build one ??

thanks and se ya later
John.

email : epajgz@epa.ericsson.se

1104. KISS problems on MFJ-1278

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-14 23:56:36 UTC
From: bruce@zarathustra.think.com
Message-ID: <BRUCE.93Dec14185636@zarathustra.think.com>
Source record: 50830

I wrote about this problem earlier in the year, but it remains unsolved. I am trying to get NOS running, and I'm new at it. After dropping it for many months, I am determined to fix the problem now.

I have an old MFJ-1278, and I upgraded the PROMs to the latest available early in the year, 3.1 if I remember correctly (the old PROMs seemed to have hooks for KISS mode, but didn't do anything useful when KISS was turned on).

Host is KA9Q NOS running under DOS 5.0 on a Gateway 486dx2/50.

I configure the 1278 with "KISS ON;RESTART" and fire up NOS. The problem is on receive: packets are corrupted in a very predictable way: every packet has a byte of zeroes at the front. Thus all the fields are offset by 8 bits, so NOS thinks everything is garbled ax25 packets. I've manually decoded the bits in enough packets to know that if I took the leading 8 bits of zero off of the packets, they would be correct.

I've tried everything I can think of. Wiring DCD high or low, trying different host interface speeds, different configuration parameters for the ax0 line in autoexec.net, talking to MFJ service, etc.; all with no luck at all.

Apparently all is well on transmit: I get responses when I ping IP hosts, but the responses are garbled as far as NOS is concerned.

Any insight would be appreciated. I guess I could make a software workaround to strip the byte, but I don't understand why it should happen.

--
--Bruce Walker
Thinking Machines Corporation, Cambridge, MA
bruce@think.com; +1 617 234 4810; Aviation: PP-ASEL; Radio: WT1M

1105. Re: 9k6 baud packet - is there any point?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-15 02:52:31 UTC
From: raichel@HAN.Paramax.COM
Message-ID: <CI22nJ.9x2@HAN.Paramax.COM>
Source record: 50837

The best (and sofar only) use I have had for my 9600 baud modem,
is to access the PACSATs! These are orbiting file servers accessable for
about 15 min periods many times a day. This is the ultimate in in store
and forward delivery, since a message can be delivered ANYWHERE in the
world (assumming they have proper equipment at recieving end, or gateway
station), in less than a few hours (WORST CASE), 90 min or so more
typical.

For more information, contact your local AMSAT group. They would
be happy to get you started.

Thanks
alan

Name: Alan Raichel If you think the answer is simple,
Call: N3IKI then you probabaly don't understand
Inet: raichel@han.paramax.com the question.
ICBM: 39'10' N 76'30' W #include <std_disclaimer.h>

1106. Re: PK-88 vs KPC-3 vs DPK-2

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-15 07:18:21 UTC
From: wb6w@netcom.com
Message-ID: <wb6wCI2Eyn.6tJ@netcom.com>
Source record: 50834

In addition to others comments, the MFJ 1270B has VERY poor front end (audio) selectivity, especially when compared with the MFJ 1270. The 1270 (if you can find one) has a switched capacitor filter that serves to filter out much crud. The 1270B has only a very simple RC filter. I found that my old 1270 ran RINGS around a brand new 1270B.

On HF, it would be even worse. I suspect that the main reason for the change is that the 1270 cannot easily be run on HF packet - you have to change a half dozen or so components to change the frequecny shift. The 1270B doesn't have this problem, but is also much more susecptible to QRM and QRN.

By the by, since the test mentioned above, my 1270B has been modified to run 9600 baud, which is does. The only problem is that the kiss-mode parameters seem to change themselves at random. I've tried to call the MFJ tech info number but get nothing but a busy signal. It's quite annoying to have my TXD, slot and persistance parameters being jangled all the time...

73 de Glenn wb6w@netcom.com

1107. Guide to the Personal Radio Newsgroups

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-15 12:00:59 UTC
From: pschleck@unomaha.edu
Message-ID: <radio/personal-intro-1-755956855@unomaha.edu>
Source record: 50836
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.info,rec.answers,news.answers

```
Posted-By: auto-faq 3.1.1.4
Archive-name: radio/personal-intro
Revision: 1.5 09/18/93 16:49:31
Changes: new mailing lists, .packet rmgroup, and .policy updates

(Note: The following is reprinted with the permission of the author.)

This message describes the rec.radio.amateur.*, rec.radio.cb, rec.radio.info,
and rec.radio.swap newsgroups. It is intended to serve as a guide for the new
reader on what to find where. Questions and comments may be directed to the
author, Jay Maynard, K5ZC, by Internet electronic mail at
jmaynard@oac.hsc.uth.tmc.edu. This message was last changed on 18 September
1993 to add the mailing lists for the new rec.radio.amateur newsgroups, to
note the rmgroup of rec.radio.amateur.packet, and to officially retire some
(in)famous threads of discussion on rec.radio.amateur.policy.

History
=======

Way back when, before there was a Usenet, the Internet hosted a mailing list
for hams, called (appropriately enough) INFO-HAMS. Ham radio discussions
were held on the mailing list, and sent to the mailboxes of those who had
signed up for it. When the Usenet software was created, and net news as we
now know it was developed, a newsgroup was created for hams: net.ham-radio.
The mailing list and the newsgroup were gatewayed together, eventually.

As the net grew, and as packet radio came into vogue, packet discussion began
to dominate other topics in the group and on the list. This resulted in the
logical solution: a group was created to hold the packet discussion, and
another corresponding mailing list was created as well: net.ham-radio.packet
and PACKET-RADIO, respectively.

These two groups served for several years, and went through Usenet's Great
Renaming essentially unchanged, moving from net.ham-radio[.packet] to
rec.ham-radio[.packet]. Readership and volume grew with the rest of the
network.

The INFO-HAMS mailing list was originally run from a US Army computer at
White Sands Missile Range, SIMTEL20. There were few problems with this
arrangement, but one was that the system was not supposed to be used for
commercial purposes. Since one of hams' favorite pastimes is swapping
gear, it was natural for hams to post messages about equipment for sale
to INFO-HAMS/rec.ham-radio. This ran afoul of SIMTEL20's no-commercial-use
restriction, and after some argument, a group was created specifically
```

for messages like that: rec.ham-radio.swap. This group wasn't gatewayed to a mailing list, thus avoiding problems.

While all this was happening, other folks wanted to discuss other aspects of the world of radio than the personal communications services. Those folks created the rec.radio.shortwave and rec.radio.noncomm newsgroups, and established the precedent of the rec.radio.* hierarchy, which in turn reflected Usenet's overall trend toward a hierarchical name structure.

The debate between proponents of a no-code ham radio license and its opponents grew fierce and voluminous in late 1989 and 1990. Eventually, both sides grew weary of the debate, and those who had not been involved even more so. A proposal for a newsgroup dedicated to licensing issues failed. A later proposal was made for a group that would cover the many recurring legal issues discussions. During discussion of the latter proposal, it became clear that it would be desirable to fit the ham radio groups under the rec.radio.* hierarchy. A full-blown reorganization was passed by Usenet voters in January 1991, leading to the overall structure we now use.

After the reorganization, more and more regular information postings began to appear, and were spread out across the various groups in rec.radio.*. Taking the successful example of the news.answers group, where informational postings from across the net are sent, the group rec.radio.info was created in December, 1992, with Mark Salyzyn, VE6MGS, initially serving as moderator.

In January, 1993, many users started complaining about the volume in rec.radio.amateur.misc. This led to a discussion about a second reorganization, which sparked the creation of a mailing list by Ian Kluft, KD6EUI. This list, which was eventually joined by many of the most prolific posters to the ham radio groups, came up with a proposal to add 11 groups to the rec.radio.amateur hierarchy in April 1993. The subsequent vote, held in May and early June, approved the creation of five groups: rec.radio.amateur.digital.misc (to replace .packet), .equipment, .homebrew, .antenna, and .space.

The Current Groups

I can hear you asking, "OK, so this is all neat history, but what does it have to do with me now?" The answer is that the history of each group has a direct bearing on what the group is used for, and what's considered appropriate where.

The easy one is rec.radio.amateur.misc. It is what rec.ham-radio was renamed to during the reorganization. Any message that's not more appropriate in one of the other groups belongs here, from contesting to DX to ragchewing on VHF to information on becoming a ham.

The group rec.radio.amateur.digital.misc is for discussions related to (surprise!) digital amateur radio. This doesn't have to be the common two-meter AX.25 variety of packet radio, either; some of the most knowledgeable folks in radio digital communications can be found here, and anything in the general area is welcome. The name was changed to emphasize

this, and to encourage discussion not only of other text-based digital modes, such as AMTOR, RTTY, and Clover, but things like digital voice and video as well. The former group, rec.radio.amateur.packet, should be removed by September 21st, 1993. It is obsolete, and you should use .digital.misc instead (or the appropriate new mailing list, mentioned below). The group has .misc as part of the name to allow further specialization if the users wish it, such as .digital.tcp-ip.

The swap group is now rec.radio.swap. This recognizes a fact that became evident shortly after the original group was formed: Hams don't just swap ham radio gear, and other folks besides hams swap ham equipment. If you have radio equipment, or test gear, or computer stuff that hams would be interested in, here's the place. Equipment wanted postings belong here too. Discussions about the equipment generally don't; if you wish to discuss a particular posting with the buyer, email is a much better way to do it, and the other groups, especially .equipment and .homebrew, are the place for public discussions. There is now a regular posting with information on how to go about buying and selling items in rec.radio.swap; please refer to it before you post there.

The first reorganization added two groups to the list, one of which is rec.radio.amateur.policy. This group was created as a place for all the discussions that seem to drag on interminably about the many rules, regulations, legalities, and policies that surround amateur radio, both existing and proposed. Recent changes to the Amateur Radio Rules (FCC Part 97) have finally laid to rest the Great Usenet Pizza Autopatch Debate as well as complaints about now-preempted local scanner laws hostile to amateurs, but plenty of discussion about what a bunch of rotten no-goodniks the local frequency coordinating body is, as well as the neverending no-code debate, may still be found here.

The other added group is rec.radio.cb. This is the place for all discussion about the Citizens' Band radio service. Such discussions have been very inflammatory in rec.ham-radio in the past; please do not cross-post to both rec.radio.cb and rec.radio.amateur.* unless the topic is genuinely of interest to both hams and CBers - and very few topics are.

The rec.radio.info group is just what its name implies: it's the place where informational messages from across rec.radio.* may be found, regardless of where else they're posted. As of this writing, information posted to the group includes Cary Oler's daily solar progagation bulletins, ARRL bulletins, the Frequently Asked Questions files for the various groups, and radio modification instructions. This group is moderated, so you cannot post to it directly; if you try, even if your message is crossposted to one of the other groups, your message will be mailed to the moderator, who is currently Mark Salyzyn, VE6MGS. The email address for submissions to the group is rec-radio-info@ve6mgs.ampr.ab.ca. Inquires and other administrivia should be directed to rec-radio-request@ve6mgs.ampr.ab.ca. For more information about rec.radio.info, consult the introduction and posting guidelines that are regularly posted to that newsgroup.

The groups rec.radio.amateur.antenna, .equipment, .homebrew, and .space are for more specialized areas of ham radio: discussions about antennas,

commercially-made equipment, homebrewing, and amateur radio space operations. The .equipment group is not the place for buying or selling equipment; that's what rec.radio.swap is for. Similarly, the .space group is specifically about amateur radio in space, such as the OSCAR program and SAREX, the Shuttle Amateur Radio EXperiment; other groups cover other aspects of satellites and space. Homebrewing isn't about making your own alcoholic beverages at home (that's rec.crafts.brewing), but rather construction of radio and electronic equipment by the amateur experimenter.

Except for rec.radio.swap and rec.radio.cb, all of these newsgroups are available by Internet electronic mail in digest format; send a mail message containing "help" on a line by itself to listserv@ucsd.edu for instructions on how to use the mail server.

All of the groups can be posted to by electronic mail, though, by using a gateway at the University of Texas at Austin. To post a message this way, change the name of the group you wish to post to by replacing all of the '.'s with '-'s - for example, rec.radio.swap becomes rec-radio-swap - and send to that name@cs.utexas.edu (rec-radio-swap@cs.utexas.edu, for example). You may crosspost by including multiple addresses as Cc: entries (but see below). This gateway's continued availability is at the pleasure of the admins at UT-Austin, and is subject to going away at any time - and especially if forgeries and other net.abuses become a problem. You have been warned.

A Few Words on Crossposting
==========

Please do not crosspost messages to two or more groups unless there is genuine interest in both groups in the topic being discussed, and when you do, please include a header line of the form "Followup-To: group.name" in your article's headers (before the first blank line). This will cause followups to your article to go to the group listed in the Followup-To: line. If you wish to have replies to go to you by email, rather than be posted, use the word "poster" instead of the name of a group. Such a line appears in the headers of this article.

One of the few examples of productive cross-posting is with the rec.radio.info newsgroup. To provide a filtered presentation of information articles, while still maintaining visibility in their home newsgroups, the moderator strongly encourages cross-posting. All information articles should be submitted to the rec.radio.info moderator so that he may simultaneously cross-post your information to the appropriate newsgroups. Most newsreaders will only present the article once, and network bandwidth is conserved since only one article is propagated. If you make regular informational postings, and have made arrangements with the moderator to post directly to the group, please cross-post as appropriate.

--
Jay Maynard, EMT-P, K5ZC, PP-ASEL | Never ascribe to malice that which can
jmaynard@oac.hsc.uth.tmc.edu | adequately be explained by stupidity.
"If my car ran OS/2, it'd be there by now" -- bumper sticker
GCS d++ p+ c++ l+ m+/- s/++ g++ w++ t+ r

--
73, Paul W. Schleck, KD3FU

pschleck@unomaha.edu

Celebrating 60 years of the Univ. of Maryland ARA - W3EAX (1933-1993)

1108. tcp-group@ucsd.edu

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-15 12:53:53 UTC
From: HOPKEN@delphi.com
Message-ID: <931215.28433.HOPKEN@delphi.com>
Source record: 50838

I probably got that name wrong but I'm close. I know they publish the tcp digest that I see on several of the tcp/ip systems. Is it possible to ftp to them to just get a few of the digests? I don't want to subscribe and get deluged with a ton of info I barely understand. Thanks...

Ken wa9wcp@wa9wcp.ampr.org WA9WCP@W9ZMR.IL.USA.NOAM

1109. Re: tcp-group@ucsd.edu

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-15 16:09:23 UTC
From: miltonm@austin.ibm.com
Message-ID: <CI33Jn.11sy@austin.ibm.com>
Source record: 50839

```
ucsd.edu:mailarchives/tcp-group/*

Format is Vyy.ddd.Z for digests, Vyy/* for "super-mbox" before digests.

milton
--
Milton Miller KB5TKF miltonm@austin.ibm.com
I never speak for IBM.
```

1110. specs for TCM3105 or similar AM chip please?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-15 20:01:44 UTC
From: koberg@spot.Colorado.EDU
Message-ID: <CI3EAy.H84@cnsnews.Colorado.EDU>
Source record: 50740

I've built my baycom modem (using the TCM3105). It's working okay
though I need to get the right xtal for transmitting. What I'm
interested in is finding out more about the TCM3105 chip itself so
I might build my own design sometime. Also, I hear about a chip,
the AM...7910 maybe? that does the same thing.

Does TI or whoever makes the AM chip (AMD?) provide spec sheets free
for these, and if so, could I get some fax numbers for them? Or,
if anyone HAS the spec sheets and it's not illegal, maybe they
could fax them to me (collect call).

Thanks.

Or heck, if someone could just tell me what each of the pins on the
chip is used for (I know what most of them are) and some normal
wiring for each setup.

koberg@spot.colorado.edu

1111. Packet with a motorola GM-300

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-15 22:35:50 UTC
From: Rich.Wacaser@launchpad.unc.edu
Message-ID: <2eo3g6$73p@samba.oit.unc.edu>
Source record: 50741

Howdy all:

I'm new to packet, and plan on using a Motorola
GM-300 (2 meter) radio. There is a connection
on the back of the radio for a direct connection
to a computer. My question is: Is there software
available to use this radio for packet _without_
using a TNC?

Please e-mail responses to: a10rxw1@hayek.cob.niu.edu

Thanks in advance for all the help.

-Rich- (KF9QQ)

--
The opinions expressed are not necessarily those of the University of
North Carolina at Chapel Hill, the Campus Office for Information
Technology, or the Experimental Bulletin Board Service.
internet: laUNChpad.unc.edu or 152.2.22.80

1112. Request info on Packet

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-15 23:41:21 UTC
From: robertm@uplherc.upl.com
Message-ID: <2eo7hn$6ph@uplherc.upl.com>
Source record: 50742

Hello,

I live in Portland, OR. I was wondering if there is anyone in my area
that is using packet radio and might be able to give me a few pointers
on how to get started and what is required. I would like to find someone
who is close enough I could see a demonstration of what a functional
system is like. I don't know enough about the subject yet to know if
I would want to invest whatever it would take to get involved. I can be
contacted either by replying to this post or directly E-mailing me at the
following addresses:

robertm@uplherc.upl.com
robertm@ursula.ee.pdx.edu

Thanks in advance for any help you can offer.

Rob Mohr

1113. Re: Host Software Choices

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-15 23:51:48 UTC
From: dts@world.std.com
Message-ID: <CI3oyC.3zA@world.std.com>
Source record: 50743

In article <36069@dog.ee.lbl.gov> biocca@csg.lbl.gov (Alan K Biocca) writes:
>I'm considering upgrading my PC Host software for the PK232. What programs
>are popular, and what are their strengths and weaknesses? I've been
>using simple terminal emulation programs up to now. I may give a shot
>at the January RTTY roundup, so one question is how do these programs
>work in a contest environment?
>
>Thanks,
>
>Alan
>WB6ZQZ
>AKBiocca@lbl.gov
>
>

PKGold is my choice. It is by a company called Interflex out in California.
You will find an advertisement for them in the back of nearly every ham mag.

For RTTY Contesting, though, I recommend WF1B's program RTTY. It is
specifically designed for RTTY contesting.

Dan N1JEB
--

Daniel Senie Internet: dts@world.std.com
Daniel Senie Consulting n1jeb@world.std.com
508-365-5352 Compuserve: 74176,1347

1114. Re: PK-88 vs KPC-3 vs DPK-2

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-16 00:50:53 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1993Dec16.005053.12245@ke4zv.atl.ga.us>
Source record: 50744

In article <wb6wCI2Eyn.6tJ@netcom.com> wb6w@netcom.com (Glenn Thomas) writes:
>In addition to others comments, the MFJ 1270B has VERY poor front end
>(audio) selectivity, especially when compared with the MFJ 1270. The
>1270 (if you can find one) has a switched capacitor filter that serves
>to filter out much crud. The 1270B has only a very simple RC filter.
>I found that my old 1270 ran RINGS around a brand new 1270B.

The removal of the MF10 was a TAPR recommended fix for all their
clones. The MF10 introduced tone twists that, when coupled with
the de-emphasis in many ham FM rigs, resulted in many missed packets.
Since the detector is a PLL, it acts as it's own filter and the MF10
wasn't accomplishing anything useful anyway. If you're getting more
errors without the MF10, then the 6 db of twist it introduced must
have been working in your favor with your particular setup. That's
not the typical case.

>By the by, since the test mentioned above, my 1270B has been modified
>to run 9600 baud, which is does. The only problem is that the kiss-mode
>parameters seem to change themselves at random. I've tried to call the
>MFJ tech info number but get nothing but a busy signal. It's quite
>annoying to have my TXD, slot and persistance parameters being
>jangled all the time...

This is a "feature" of one release of the TAPR firmware. The KISS
parameters are reset to their default after X minutes of inactivity.
Swap in either earlier or newer firmware and this will go away.
Better, just install the K3MC KISS only firmware and forget about
it. It's more robust, and you don't have to worry about having a
battery in the TNC to save settings.

Gary

--
Gary Coffman KE4ZV | I kill you, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | You kill me, | uunet!rsiatl!ke4zv!gary
534 Shannon Way | We're the Manson Family | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -sorry Barney |

1115. Re: Packet with a motorola GM-300

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-16 12:19:54 UTC
From: kb2ear@kb2ear.ampr.org
Message-ID: <2epjpa$b56@kb2ear.ampr.org>
Source record: 50749

This connector is used for programing the radio. There is no way to use
it like a TNC.. Sorry

73,
--
Scott R. Weis KB2EAR
Internet: kb2ear@kb2ear.ampr.org
Snail Mail: 10 Palmer Rd., Kendall Park, NJ, 08824-1228
Phone: +1 908 297 0469

1116. Re: Best low-cost WEFAX SW/HW

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-16 12:45:37 UTC
From: ian@isis.demon.co.uk
Message-ID: <756045937snz@isis.demon.co.uk>
Source record: 50755
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.misc

In article <2eki2g$1p5@gdls.com> turini@gdls.com "Bill Turini" writes:

>I'd like to explore Weather FAX at a reasonable cost. I noticed several
> commercial packages around $100 or so (AEA, SSC, etc) and one shareware with a
> homebrew interface.
>
>Does anyone have any recommendations as to the best way to go. I would like to
> keep the cost less than $150, as that's all my dog has saved up for my
> Christmas present :-)

JVFAX with the op-amp interface is cheap shareware and works well.
SSC HF-FAX is a very polished performer.
They both work well but I found the the SSC offering was more convenient. The
JVFAX interface works with the SSC, but not the other way round. It also
works with Hamcomm (RTTY), which may be a consideration. Hamcomm is just so
damned pretty !

Regards
Ian
--

| Ian Smith | "The Moving Finger writes;
| ian@isis.demon.co.uk | and, having writ, Moves on."

1117. Help needed w/MFJ1278 multigray fax

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-16 14:50:41 UTC
From: grumpy@jpradley.jpr.com
Message-ID: <CI4uKK.G5I@jpradley.jpr.com>
Source record: 50752

As the subject line says...

I am trying to write some code to display multigray faxes from an MFJ1278.
According to the manual, recieved bytes = 'p', 'q', or 'r' are sync pulses;
all others contain data. When I turn MULTIFAX ON, I seem to get an
inordinate number of syncs and not much data. Before you even think it...
yes, the signal is tuned correctly, since if I turn MULTIFAX OFF and
otherwise leave the system untouched I get nice monochrome faxes...

Any hints/kinks/info would be greatly appreciated...

Thanks,

Jeff Markel

Jeffrey Markel | uucp: jpradley!argos!markel | Argos Computer Systems Inc
KD2HN | internet: grumpy@jpradley.jpr.com | 110 W. 32nd Street
(212)594-5400 | amprnet: kd2hn@kd2hn.ampr.org | New York, NY 10001
==========
The New World Order is ... "Shoot to kill!"
==========

1118. Re: Packet radio beginner question

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-16 16:26:52 UTC
From: ab268@FreeNet.Carleton.CA
Message-ID: <CI4z0t.BBF@freenet.carleton.ca>
Source record: 50750

In a previous article, gary@ke4zv.atl.ga.us (Gary Coffman) says:

>G3RUH style modems, off the shelf from several vendors. There are also
>faster modems such as the GRAPES 56kb RF modem system which is the modem
>and the radio in one, necessary because of the special MSK modulation it
^^^^^^^^^^^^^^^^^^^^^^
>uses. And there are data radios that can be used for direct FSK at 19.2 kb,

Can someone tell me What is special MSK modulation ? From the ARRL network
conference paper, it said it is bandwidth limited MSK. The only
modulation scheme that I know of is Modified MSK (MMSK) which was proposed
to be used in the commercial satellite channel in the early 80's.

Ying VE3FUB
--
Ying Hum ~{L7S"G? dWL+;*#,<SDC4s~}
ab268@freenet.carleton.ca

1119. ICOM handheld 24AT at 9600 baud!?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-16 16:51:12 UTC
From: taalebi@gel.ulaval.CA
Message-ID: <9312161651.AA07733@stlaurent.gel.ulaval.ca>
Source record: 50751

Hi;
I wonder if there is any way of modifying an
ICOM 24AT (handheld)
for running 9600 baud packet?

Thanks in advance.

--73's de N1HPP

==
__ _ M. Ali Taalebinezhaad,
/) // Research Associate of the Canadian Institute
/- -/ // o for Robotics and Intelligent Systems
/ /_</_<_ Email: taalebi@gel.ulaval.ca
==

1120. Re: 9k6 baud packet - is there any point?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-16 19:04:39 UTC
From: dave@llondel.demon.co.uk
Message-ID: <756093879snx@llondel.demon.co.uk>
Source record: 50753

As a general guide to modifying rigs..... they need to have a 20kHz wide IF filter if possible, although a 15kHz one appears to work reasonably well.

For receive, take the signal from the discriminator output before it hits any of the audio filtering.

For transmit, it depends on what type of rig you have; crystal ones are easier to fiddle because you just stick a varicap across the TX crystal (with DC blocking capacitor and series resistor.... rtfm for details) and apply the modulation to that. A synth may be a bit harder, depending on the particular rig, but as a first go, you might be able to stick the mod into the VCO. Whether it works will depend on the characteristics of the loop.

Disclaimer: if you want to modify an expensive rig then do it at your own risk. I stick to cheap ex-pmr crystal-controlled rigs because they are a lot easier to modify.

Dave
--

****
* G4WRW @ GB7WRW.#41.GBR.EU AX25 * Start at the beginning. Go on *
* dave@llondel.demon.co.uk Internet * until the end. Then stop. *
* g4wrw@g4wrw.ampr.org Amprnet * (the king to the white rabbit) *
****

1121. Re: 4800 AND 9600 BAUD ???

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-16 19:06:04 UTC
From: dave@llondel.demon.co.uk
Message-ID: <756093964snx@llondel.demon.co.uk>
Source record: 50754

In article <1993Dec15.011734.1@eds.ericsson.se> epabmg@eds.ericsson.se writes:
>
>Hi,
> I was wondering what type of modulation methods are
>used in packet for 4800 and 9600 data rates ?
>
>Do they use AFFSK, FSK, PSK ETC... and what tones frequencies etc ??
>
9600baud tends to be FSK.

>Are there any ciruit diagrams of 4800 and 9600 modems kicking around, if I
>wanted to build one ??
>
The K9NG and G3RUH designs are the most popular - you will doubtless find
them in old magazines somewhere. Kits are available AFAIK.

Dave
--

****
* G4WRW @ GB7WRW.#41.GBR.EU AX25 * Start at the beginning. Go on *
* dave@llondel.demon.co.uk Internet * until the end. Then stop. *
* g4wrw@g4wrw.ampr.org Amprnet * (the king to the white rabbit) *
****

1122. Re: COMPLETE Documented

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-16 22:56:04 UTC
From: Burt.Kaufman@f40.n382.z1.fidonet.org
Message-ID: <756090011.AA00270@afarm.uucp>
Source record: 50756

-=> Quoting Ian Wade to All <=-

IW> "NOSintro" is also available in the United States from ARRL,
IW> 225 Main Street, Newington, CT 06111-1494.
IW> Tel: (203)-666 1541
IW> Fax: (203)-665 7531
IW> Please contact them direct for pricing.

IW> P.S. The book "NOSintro" makes several references to the
IW> "NOSview" software package. This package contains a
IW> full working set of KA9Q NOS software, complete with
IW> all the control files listed in the book.

IW> The "NOSview" software is available free of charge.
IW> If you would like a copy, enclose a DOS-formatted
IW> diskette (any size EXCEPT 360KB) with your order for
IW> the book. N.B. I can only supply the software in
IW> DOS format.

Thanks for the info. I don't suppose there's a good US source
for the software, for those of us who find it easier to send the
ARRL a check?

Burt N5SYY

... "Mork, mork, mork..." - Swedish Chef
___ Blue Wave/QWK v2.12

1123. BAYCOM TNC DRIVER for UNIX?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-17 02:35:56 UTC
From: TGOODIN@delphi.com
Message-ID: <931216.77756.TGOODIN@delphi.com>
Source record: 50748

Does anyone have a source C available for the Baycom Packet Modem?
I would like to compile one to run in the background on my
ATT 3B2 Unix Box. Any suggestions on how the DOS L2
Program works that comes with baycom?
TGOODIN @ DELPHI.COM
KD4OFO @ W4NJA

1124. AMPR Coord. NoCal E-Mail?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-17 15:30:19 UTC
From: dparker@netcom.com
Message-ID: <dparkerCI6r2J.Dwp@netcom.com>
Source record: 50757

Does anybody know if Bob Meyer K6RTV or Douglas Thorn N6OYU have
and internet e-mail address for handling IP address requests for
the AMPR Network? If not what is the normal procedure for requesting
an IP address from someone on the AMPR Network Volunteer Coordinator
List?
Thanks for any help.
Dave Parker
KD6RRS, Tracy, CA.

1125. Re: AMPR Coord. NoCal E-Mail?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-17 16:20:33 UTC
From: glenne@sad.hp.com
Message-ID: <CI6tEA.yz@srgenprp.sr.hp.com>
Source record: 50758

: Does anybody know if Bob Meyer K6RTV or Douglas Thorn N6OYU have
: and internet e-mail address for handling IP address requests for
: the AMPR Network? If not what is the normal procedure for requesting
: an IP address from someone on the AMPR Network Volunteer Coordinator

Dave

Try Bob via Westnet if you don't find his Internet address
K6RTV@WA6NWE-1 is old but may still work

n6oyu used to be thom@apple.com but I don't know that the account
is good now that he left Apple.

If you have 2M packet, you can probably find out more from wa6nwe.

73
Glenn Elmore n6gn

ax.25 n6gn@wx3k.#nocal.ca.usa.na
amateur IP: glenn@SantaRosa.ampr.org
Internet: glenne@sr.hp.com

1126. Re: Best low-cost WEFAX SW/HW

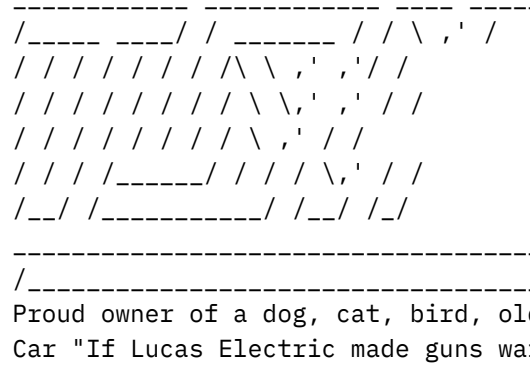
Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-17 16:58:13 UTC
From: wagner@mala.bc.ca
Message-ID: <1993Dec17.095813.2979@malins.mala.bc.ca>
Source record: 50759
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.misc

In article <2eki2g$1p5@gdls.com>, turini@gdls.com (Bill Turini) writes:
> I'd like to explore Weather FAX at a reasonable cost. I noticed several commercial packages around $100 or so (AEA, SSC, etc) and one shareware with a homebrew interface.
>
> Does anyone have any recommendations as to the best way to go. I would like to keep the cost less than $150, as that's all my dog has saved up for my Christmas present :-)
>
> Thanks
>
> Bill

I have been using a PC HF Facsimile system for a couple of years sold by "Sofware Systems Consulting, John E Hoot". It is under $100. Comprised of a small demod unit mounted in a DB 25 plug. It's self powered so it will plug into anything. It uses a serial port and is compatible with all monitor arrangements up to VGA. Charts and Satellite photos can be black/white, or various color enhancements. Setup was "zero". Plug it into the radio (I had a "Record (line level)" jack on my Yaesu which was ahead of the volume control so I can monitor and capture at the same time. It has a setup "oscilloscope" mode that makes it very easy to tune. It also has an auto mode which can be set to capture any number of images at any programmed time.

Contact Software Systems Consulting
amateur Radio Group
150 Avenida Cabrillo, Suite C
San Clemente, CA. 92672
They have a BBS from 8 to 11 pm at (619) 259-5554

Comes with an excellent 60 page bound manual and 70 + pages of charts, details, etc...
--



Proud owner of a dog, cat, bird, old Tractor and a British Car "If Lucas Electric made guns wars wouldn't start"

1127. IC229 to TNC diagram needed.

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-17 20:52:22 UTC
From: bat@gdstech.GRUMMAN.COM
Message-ID: <BAT.93Dec17155222@gdstech.GRUMMAN.COM>
Source record: 50766

I need the wiring diagram for the mic plug on the front
so I can interface audio, PTT, etc, for packet. Thanks. -pat
--
--
* Pat Masterson D12-25 | KE2LJ@KC2FD *
* Grumman Data Systems | 516-346-6316. *
* Bethpage, NY 11746 | bat@gdstech.grumman.com *

1128. Re: Request info on Packet

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-18 00:14:06 UTC
From: msanders@sim.es.com
Message-ID: <msanders-171293171407@msanders.sim.es.com>
Source record: 50760

In article <2eo7hn$6ph@uplherc.upl.com>, robertm@uplherc.upl.com wrote:

>
> Hello,
>
> I live in Portland, OR. I was wondering if there is anyone in my area
> that is using packet radio and might be able to give me a few pointers
> on how to get started and what is required. .. some deleted.....
>
> Rob Mohr

Rob:

Suggest you pick up one of the books on packet. ARRL has one, "Your Packet Companion", and there are 4-5 more. That one is only about $8 and will be something you can reference as you go along.

Milt
--
==========

Opinions, thoughts, &cetera are my own (when I can remember them).

"He flies the sky KB7MSF
Like an Eagle in the eye UTAH
of a hurricane that's abandoned."

America

1129. Unix Wampes Documentation ?Where?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-18 04:40:15 UTC
From: kjv@exuco1.exucom.com
Message-ID: <1993Dec18.044015.724@exuco1.exucom.com>
Source record: 50765

Please E-Mail responses as my USENET is currently limited to
outgoing.............

Here is the problem, I am runnign Linux on my machine here,
"exuco1.exucom.com", and I am also running a packet based BBS called
Wampes on it. I am having some difficulty configuring Wampes because
the distribution I got from ucsd.edu (November 1993) doesn't have any
in it.

It has an "intro.txt" file, but that is about it...

What I would like to do is gateway traffic on my TCP/IP LAN
out to Packet TCP/IP. (No need to worry about 3rd party traffic as
we're all amateurs here.) Also, my mailer forwards anything that is
going out to ampr.org to myself "kjv@exucom.com" for approval.

But! Just one thing!

I'm having some difficulty getting a SLIP link to function
between the Linux box over a pseudo tty and the Wampes source...
Anything other than an ICMP Ping comes out on Wampes as having a bad
checksum. Go figure?!?! I'm clueless as to why that is... I've
tried reducing the speed of the connection down to 1200bps, but even
that doesn't do it...

In short, I need to UNIX Wampes documentation to help me
out... I also cannot seem to get the convers daemon to link up to the
one on the JNOS machine...

As we will be converting the majority of the hosts here in
Western New York to Linux and Wampes I would greatly appreciate it if
some kind soul could perhaps E-Mail me the documentation, or at least
tell me where I can get it?

The DOS documentation has proven to be worhtless on the UNIX
side of things... However it is quite nice...

Thanks in advance, and Happy Holidays...

--
------------------------+---
.signature Beta 0.25-4 | Karl J. Vesterling - N2VQM
Patents Pending | kjv@exucom.com - Internet
(C) 1993 | n2vqm@n2vqm.ampr.org - MailDrop

1130. Re: COMPLETE Documented NOS Wanted

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-18 07:14:40 UTC
From: ian@g3nrw.demon.co.uk
Message-ID: <756198880snz@g3nrw.demon.co.uk>
Source record: 50764

In article <756090011.AA00270@afarm.uucp> Burt.Kaufman@f40.n382.z1.fidonet.org
writes:

> IW> P.S. The book "NOSintro" makes several references to the
> IW> "NOSview" software package. This package contains a
> IW> full working set of KA9Q NOS software, complete with
> IW> all the control files listed in the book.
>
>Thanks for the info. I don't suppose there's a good US source

Yes, here is some info about "NOSview".

```
============================
KA9Q: NOSview RELEASE [304]
============================
```
by Ian Wade, G3NRW

NOSview [304] is available via FTP on

```
* * * * * * * * * * * * * * * * * * * * * * * *
* ucsd.edu: /hamradio/packet/tcpip/nosview *
* * * * * * * * * * * * * * * * * * * * * * * *
```

Download the file:

```
* * * * * * * * * *
* *
* nosvw304.zip *
* *
* * * * * * * * * *
```

NOSview, first introduced in September 1991, is an on-line
documentation and runtime package for the KA9Q Network
Operating System (NOS). It contains:

```
++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
```

*** probably the only complete reference work anywhere
that describes all of the commands to be found in the
major NOS releases.

*** a TSR file viewer that lets you read the NOSview
documentation on-line, without breaking out of NOS.

*** NOSgas: the "NOS Get-Away Special" -- a complete set
of working NOS runtime software, based on the PA0GRI
2.0m release.

*** a complete set of templates for the NOS control files.

*** full details on how to get the book "NOSintro", which
describes in detail how TCP/IP works and how to use
KA9Q NOS. Ideal for beginners to TCP/IP (and more
advanced users will find many gems of helpful
information there as well).

++

NOSview [304] contains many new documentation files, and
the template NOS control files match the listings in the
book "NOSintro".

Extras include ....

UUENCODE/UUDECODE file conversion utilities
AX.25 Baycom Packet Driver
KISS protocol documentation
HOSTS <> DOMAIN conversion programs
PCElm and ELM Mailers
The Clockwork VIEW TSR file viewer

As NOSVW304.ZIP is quite large (around 700 KB), you may
prefer instead to get your copy by mailing a DOS-formatted
diskette (any size EXCEPT 360 KB) and return mailer to:

Ian Wade, G3NRW
7 Daubeney Close
Harlington
DUNSTABLE
Bedfordshire
LU5 6NF
United Kingdom

Please enclose return postage as follows:

United Kingdom: UK postage stamps
Rest of Europe: 3 IRCs
The Americas, Africa: 7 IRCs
Rest of the World: 9 IRCs

(Any unused IRCs will of course be returned).

There is no charge for NOSview, so please do NOT enclose
any form of payment.

73 de Ian Wade, G3NRW

September 1993

P.S. If you would like full details of the book
"NOSintro", please email me direct:

ian @ g3nrw.demon.co.uk

--
+---------------------------------+---------------------------------------+

Ian Wade	e-mail: ian @ g3nrw.demon.co.uk
7 Daubeney Close, Harlington,	AMPRnet: g3nrw.ampr.org [44.131.5.147]
Dunstable, Beds, LU5 6NF, UK.	AX.25: G3NRW @ GB7BIL.#27.GBR.EU
+---------------------------------+---------------------------------------+

1131. Re: BAYCOM TNC DRIVER for UNIX?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-18 09:55:28 UTC
From: lvds@stdin.gatelink.fr.net
Message-ID: <1993Dec18.095528.2299@stdin.gatelink.fr.net>
Source record: 50769

TGOODIN@delphi.com wrote:
: Does anyone have a source C available for the Baycom Packet Modem?
: I would like to compile one to run in the background on my
: ATT 3B2 Unix Box. Any suggestions on how the DOS L2
: Program works that comes with baycom?

I am running Linux and i would like to control baycom inside. Can anybody
tell me software availables to do so ?

Cheers, Laurent.

1132. Need info on running AMTOR/PACTOR with old Atlas HF rig(s)

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-18 19:41:48 UTC
From: bruces@mpd.tandem.com
Message-ID: <1993Dec18.194148.20380@integrity.uucp>
Source record: 50785

All,
I'm in the process of trying to get on AMTOR (and hopefully
PACTOR once I get the FW upgrade from MFJ) and have had problems
while using an Atlas 350 (or 210). I can't seem to link up with any
stations on 20 while they're calling CQ (FEC B). I suspect it's the
AGC timing of the Atlas (which is not externally defeatable). Can
someone tell me if this is common on old rigs due to their slow
response time?
(BTW, I have no problem copying mode "A" or "B" transmissions in
"monitoring" mode, using an MFJ-1278 TNC, running rev 3.3 FW)
Thanks

--
| Bruce Sawtelle AX.25 : W3NJ @ N5LJF.TX.USA.NA |
| Tandem Computers, Inc. Internet : bruces @ mpd.tandem.com |
| 14231 Tandem Blvd. USENET : halley!bruces |
| Austin, Tx 78728 TCP/IP : 44.76.1.42 (w3nj.ampr.org) |

1133. Re: Software suggestion for MFJ-1278?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-18 20:46:39 UTC
From: njbirdman@delphi.com
Message-ID: <9312181539591.njbirdman.DLITE@delphi.com>
Source record: 50767

Look for Lan-Link. I think the latest version is 2.1, although anything after V2.0 is OK. It is on Copuserve, AOL. Not sure about Delphi. Also on almost all "Ham" BBS such as N8EMR, WB2FFV, etc. Excellent Program!

.. If at first you don't succeed, call it Version 1.0...

~ TLX v3.20/D-LITE2.02 ~

1134. Gateways

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-18 22:10:45 UTC
From: twright@freenet2.scri.fsu.edu
Message-ID: <2evv55$31q@mailer.fsu.edu>
Source record: 50768

Some local Hams in the Morehead Ky area have expressed that they would
like to have the local University set up a Packet/Internet Gateway to
they would be able to FTP and do some other connections.

This area is hard pressed by not having a local Digipeter to connect
to. The closes ones are in Lexington Ky Berea Ky Ashland, Ky and
Cinn. Ohio. All takes humungus power requirements to connect to and
the gateway appears to be the best approach.
We are looking for positive reasons/arguments or other positive remarks
to take to the University to persuade <sp> them to create one. It
will be for registered/confirmed Amateur radio ops and will have good
security in place.
Your positive remarks will be reviewed and the negitive ones defaulted
to the /del/null.
Please reply to the following addresses:

T.Wright@msuacad.morehead-st.edu
twright@freenet.fsu.edu
ar098@yfn.ysu.edu
the latter 2 will auto forward to the Morehead account

Thankyou

Tim Wright KD4OVM
--

1135. sunax25 v1.2 modloadable for 4.1.3 or Solaris

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-19 02:10:59 UTC
From: stener@lgc.com
Message-ID: <1993Dec19.021059.3933@lgc.com>
Source record: 50770

I am interested in getting a group of people (or 1 person) who would be interested in the idea of converting the sunax25 packet drivers to a modloadable form for use on SunOS 4.1.3, SunOS 4.1.3C, and Solaris 2.x and forward.

thanks,

stuart, n3gwg

stuart@Jane.sas.upenn.edu

1136. Newton PDA on packet?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-19 04:43:01 UTC
From: dave@eram.esi.com.au
Message-ID: <5026@eram.esi.com.au>
Source record: 50699

OK; we know that the HP-95LX can be put onto packet (thanks to Jay, I believe). What about the Newton PDA? It has a serial port (and an I/R port), but the keyboard, well, I did the usual test of writing my name on it, and it rendered it as "Daily Horrible", much to the XYL's amusement...

Seriously, is there a use for the Newton on packet? One price I got here in Oz was AU$1495, so they aren't cheap...

--
Dave Horsfall (VK2KFU) VK2KFU @ VK2RWI.NSW.AUS.OC PGP 2.3
dave@esi.COM.AU ...munnari!esi.COM.AU!dave available

1137. Mir QSL address needed please

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-19 08:37:19 UTC
From: jeff@ve6mgs.ampr.ab.ca
Message-ID: <CI9xA8.GJ5@ve6mgs.ampr.ab.ca>
Source record: 50775

Hello there! I need the QSL address for MIR> Please send it to me!!
I have contacted the station as well as a friend of mine
73 de VE6HF

1138. SLIP to a KISS TNC on a sysV unix machine

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-19 12:21:27 UTC
From: anderson@spool.mu.edu
Message-ID: <2f1h07$hau@spool.mu.edu>
Source record: 50776

I am attempting to setup SLIP on esix sysVr4, and I was wondering if
anyone had seen any information on how to attach a KISS TNC.
Any info would be appreaceated, please e-mail, as I am at home for
christmass, and don read news long distance ;)

Thanks

Chris{}Anderson
Ka9uqo
anderson@spool.mu.edu

1139. Kenwood (Trio) TR7930 mic connections?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-19 16:51:39 UTC
From: paul@topsy.demon.co.uk
Message-ID: <756319899snz@topsy.demon.co.uk>
Source record: 50777
Cross-posted to: uk.radio.amateur,rec.radio.amateur.digital.misc

A radio amateur across town has just acquired a TR7930 (European model).
He wants to connect it to his TNC-2, does someone have the mic pinout and
(in UK) a circuit diagram please.

Many thanks.
Paul G1PJJ

--
Paul Turvey | paul@topsy.demon.co.uk
| Amprnet: paul@g1pjj.ampr.org
| AX25: g1pjj@gb7zaa.#34.gbr.eu

1140. Internet White Pages or BBS?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-19 19:29:43 UTC
From: jfh@netcom.com
Message-ID: <jfhCIArHK.ILK@netcom.com>
Source record: 50778

I meant to post this here, but forgot to type the "digital" part:

jfh@netcom.com (Jack Hamilton) wrote:
>Is there a White Pages service reachable via telnet somewhere? I know
>about the callsign server, but that doesn't provide the same information.
>
>Is there a BBS I can telnet to? THere are some BBS's that work via mail,
>but telnet would be much better.

--

Jack Hamilton POB 281107 SF CA 94128 USA
jfh@netcom.com kd6ttl@w6pw.#nocal.ca.us.na

1141. TNC for CB Frequecies

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-19 20:55:28 UTC
From: andrew@andy.PRoxima.alt.ZA
Message-ID: <9312191255.AA02862@andy.proxima.alt.za>
Source record: 50774

I would like to know if it is possible to use a TNC on a CB Radio. In
our country we have access to channels 19-27 on CB Sets. I would like
to know if there are TNC'S Available that would work on these
frequencies using KISS mode with KA9Q. If so where could I obtain one
Perhaps a schematic or kit, And what would that cost me.

Thanks In Anticipation.

Please reply to : andrew@andy.proxima.alt.za

Andrew Cameron
Internet: andrew@andy.proxima.alt.za
X.400: /G=Andrew/S=Cameron/A=Telkom400/C=ZA

1142. Re: F6FBB release 5.15b ?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-19 21:17:08 UTC
From: hnet@world.std.com
Message-ID: <CIAwGL.Iws@world.std.com>
Source record: 50779

CATALAN@VORTEX.UFRGS.BR writes:

>Can someone please tell me if is available the new release 5.15b of the
>F6FBB bbs software ? If so, where can be ftp'ed ?
>Tks, 73,

>Luiz Catalan
>internet: catalan@vortex.ufrgs.br
>packet: pp5aq@pp5aq.bra.sa

I read some rumors a while ago. As soon as I find something I will inform
you. ;-)

73's Edson PU1JTE

PS. Nice to see you here hi!!!

--

HealthNet - a service of SatelLife, Inc., Cambridge, MA
"Global Partnerships for Health"
(a not-for-profit corporation)

1143. Ramsey TNC kit for use with IBM PC, any good?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-20 01:22:00 UTC
From: wa2ise@netcom.com
Message-ID: <wa2iseCIB7so.DJA@netcom.com>
Source record: 50780

Saw the Ramsey TNC kit (the one that comes with the Baycom program) that you connect to the serial com port of your IBM PC (or clone). It gets its power from the PC. A small pc board, and a handful of parts. No adjustments it claims, as all the frequency tones are crystal locked. Halted in Silicon Valley wants $60 for it, seems a bit pricey considering the amount of parts in it.

How good does this kit work?

1144. TNC's which one?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-20 01:48:24 UTC
From: srbarnet@nyx.cs.du.edu
Message-ID: <1993Dec20.014824.25078@mnemosyne.cs.du.edu>
Source record: 50781

Hi everyone,
I am trying to get started in packet radio and am currently looking into getting an outside antenna and a TNC. Currently I have a Radio Shack HTX-202 radio, a MFJ rollup antenna, a power source for the radio, and a BAycom BP-1 modem. I have not had much luck connecting anywhere with this modem. I even had a friend of mine try the modem with his setup, which includes the same radio and he couldn't get anything either. Even though he has been packeting succesfully for years with his own setup. He is the one that wired it and Baycom said it was wired correctly.

Can any suggest a good TNC for my setup. My friend has suggested the MFJ 1274C. Is this any good? Which other ones?

Thanks in advance.

Scott Barnett
srbarnet@nyx.cs.du.edu
N3OFO

1145. Re: Ramsey TNC kit for use with IBM PC, any good?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-20 02:15:33 UTC
From: fmitch@netcom.com
Message-ID: <fmitchCIBA9x.G6G@netcom.com>
Source record: 50782

Robert Casey (wa2ise@netcom.com) wrote:
: Saw the Ramsey TNC kit (the one that comes with the Baycom program) that
: you connect to the serial com port of your IBM PC (or clone). It gets
: its power from the PC. A small pc board, and a handful of parts. No
: adjustments it claims, as all the frequency tones are crystal locked.
: Halted in Silicon Valley wants $60 for it, seems a bit pricey considering
: the amount of parts in it.

: How good does this kit work?

i don't know about the ramsey, but the A & A engineering kit works
great... a nice kit... and, with the right software, you can also
use it for rtty... marv, k4bvg and i also tried the a&a unit on
amtor and pactor thru a local repeater, but the synthesized radios
won't switch fast enough for those modes... but rtty through the
repeater works great...

mitch, wa4osr
--
---
fmitch@netcom.com
Felton "Mitch" Mitchell, WA4OSR in Mobile, Alabama USA
205-342-7259 home, 205-476-4100 work, 205-476-0465 FAX
co-sysop for W4IAX bbs running fbb ... sysop for WA4OSR DXCluster in Mobile..

1146. BBS 4-letter hierarchical codes

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-20 06:49:27 UTC
From: enge@enge.almaden.ibm.com
Message-ID: <2f3htn$lv6@juniper.almaden.ibm.com>
Source record: 50783

This is the proposed list of 4-letter codes for the last position in
the hierarchical address. I have posted this to the BBS authors and
received only notes of agreement from those that replied.

.EURO -- Europe
.MEDR -- Mediterranean
.INDI -- Indian Ocean including the Indian subcontinent
.MDLE -- Middle East
.SEAS -- South-East Asia
.ASIA -- The Orient

.NOAM -- North America (Canada, USA, Mexico)
.CEAM -- Central America
.CARB -- Caribbean
.SOAM -- South America

.AUNZ -- Australia/New Zealand
.EPAC -- Eastern Pacific
.NPAC -- Northern Pacific
.SPAC -- Southern Pacific
.WPAC -- Western Pacific

.NAFR -- Northern Africa
.CAFR -- Central Africa
.SAFR -- Southern Africa

.ANTR -- Antarctica

Roy Engehausen, AA4RE
enge@almaden.ibm.com

1147. Re: COMPLETE Documented

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-20 08:09:14 UTC
From: "Seth M. Dworken" <p00123@psilink.com>
Message-ID: <2965449904.9.p00123@psilink.com>
Source record: 50784

I received my copy of NOSIntro from CAPRA...

jchesner@holonet.net

CAPRA - Chicago Area Packet Radio Ass'n
P.O. Box 8251
Rolling Meaddows, Illinois 60008

It was $22.50. This was quite a while ago, so I do not know if they
have any more copies. I would make sure before sending any money!

The Nosview software is available via anonymous FTP as follows:

ucsd.edu: /hamradio/packet/tcpip/nosview

nosvw304.zip

Regards, Seth

1148. quad help

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-20 14:50:47 UTC
From: gwood@robins.af.mil
Message-ID: <2f4e47$kkv@wrdis02.robins.af.mil>
Source record: 50786

I need some help trying to build a quad for 6m i would like to make
it either a 2 or 3 element quad can some one out there please help me
out on boom,spacing for element driver, etc or if you can tell me of a
good book that might help me out.
--

KC4YBL
GREG WOOD

1149. Re: BAYCOM TNC DRIVER for UNIX?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-20 14:53:29 UTC
From: jwl@sedist.NoSubdomain.NoDomain
Message-ID: <1993Dec20.085330.19306@walter.cray.com>
Source record: 50691

In article <931216.77756.TGOODIN@delphi.com>, TGOODIN@delphi.com writes:
|> Does anyone have a source C available for the Baycom Packet Modem?
|> I would like to compile one to run in the background on my
|> ATT 3B2 Unix Box. Any suggestions on how the DOS L2
|> Program works that comes with baycom?
|> TGOODIN @ DELPHI.COM
|> KD4OFO @ W4NJA

I suspect that if you had the source, you would spend a long time
making it work on a Unix box. It is my understanding that
the Baycom software is heavily reliant on the PC hardware and
does timing in a way that might be somewhat incompatible
with Unix. Not to say that it couldn't be modified to work, but
it would be a lot of work. Maybe it would be easier to
write a duplicate program based on Unix.

Just IMHO, of course.

Jim.

Disclaimer: All of the above may be total nonsense 8^)
--

Jim Lynch, Sales Analyst, Cray Research, Inc. / ARS: K4GVO
Southeast District, Phone: (404) 631-2254, Email: jwl@sedist.cray.com
Suite 270, 200 Westpark Drive, Peachtree City, GA 30269

1150. Re: TNC for CB Frequecies

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-20 16:58:58 UTC
From: kharker@bnr.ca
Message-ID: <2f4lki$afc@crchh941.bnr.ca>
Source record: 50787

In article <9312191255.AA02862@andy.proxima.alt.za>, andrew@andy.PRoxima.alt.ZA writes:
|> I would like to know if it is possible to use a TNC on a CB Radio. In
|> our country we have access to channels 19-27 on CB Sets. I would like
|> to know if there are TNC'S Available that would work on these
|> frequencies using KISS mode with KA9Q. If so where could I obtain one
|> Perhaps a schematic or kit, And what would that cost me.
|>
|> Thanks In Anticipation.
|>
|> Please reply to : andrew@andy.proxima.alt.za
|>
|>
|> --
|> Andrew Cameron
|> Internet: andrew@andy.proxima.alt.za
|> X.400: /G=Andrew/S=Cameron/A=Telkom400/C=ZA
|> --

While, technically it is feasible to use a tnc on CB freqs, you might
want to check the legality of it. I'm not certain about South Africa, but
at least in North America, the only legal mode of operation on CB freqs is
voice. I imagine the same holds true where you live.

_ken/n1pvb

1151. RTTY Listening

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-20 17:39:04 UTC
From: "George C. Rybicki" <seryb@lims01.lerc.nasa.gov>
Message-ID: <2f4nvo$2v8@eagle.lerc.nasa.gov>
Source record: 50788

Does anyone have a few good RTTY listening frequencies to share. I was looking for
english langauge news broadcasts. Many books are avaialible on this subject, but they are usually obselete long before they are published. Thanks for any help.

Merry Xmas

George (KE8YX)

1152. Tuning SunOS 4.1 for packet

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-20 18:36:08 UTC
From: n1gak@netcom.com
Message-ID: <n1gakCICJo9.Cp0@netcom.com>
Source record: 50789
Cross-posted to: rec.radio.amateur.digital.misc,comp.sys.sun.hardware

Greetings! I'm having some efficiency trouble using my Sun
on the AMPR network around here. All of SunOSes kernel routines
are optimized for ethernet. So, some things really fall apart when
used at 1200 bps half-duplex (yes, I know that 1.2k is the silliest
thing in the world ... explain that to thousands of hams with
bitty boxes) Some things, I've recompiled (I happen to have Sun sources
when I bought the machine) to be more friendly (e.g. ping -- now
it only sends an ICMP ECHO every three seconds ... seeing as a single
packet takes very nearly a second -- the regular ping will fill 100%
of the channel)

How do I go about changing some of the other tools? For example,
my SMTP will tend to send mail with many many very small packets,
and if I should try a "talk" across the net -- well -- I ended up
turning off the radio, ifconfig ax0 down, killed the ax25 process,
and STILL had to wait 'til a number of pending packets finished.

Any advice, etc.
Scott -- scott@jackson.lambda.com (preferred)
scott@n1gak.ampr.org (if you like things to go slowly)

1153. Where is the FAQ?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-20 21:00:38 UTC
From: ncherry@cbnewsg.cb.att.com
Message-ID: <CICqD3.LHE@cbfsb.cb.att.com>
Source record: 50690

I'm interested in digital ham and I need info on equipment, licensing,
and software. I have DOS boxes but would much rather run under Unix.
Maybe there is a FAQ? If so where?

NJC

1154. TNC for CB Frequecies

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-20 23:54:04 UTC
From: jangus@skyld.tele.com
Message-ID: <756431644snx@skyld.tele.com>
Source record: 50693

In article <9312191255.AA02862@andy.proxima.alt.za> andrew@andy.proxima.alt.za writes:

> I would like to know if it is possible to use a TNC on a CB Radio. In
> our country we have access to channels 19-27 on CB Sets. I would like
> to know if there are TNC'S Available that would work on these
> frequencies using KISS mode with KA9Q. If so where could I obtain one
> Perhaps a schematic or kit, And what would that cost me.
>

Use an MFJ 1270b TNC. They are reasonably priced $135 US (here anyways)
and accept a range of third party EPROMs for networking purposes.

MFJ Enterprises, Inc.
Box 494
Mississippi, MS 39762
USA

Judging on what Packet in the US looks like, running it on CB doesn't
seem like any major affront. Have fun!

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "It is difficult to imagine our
Internet: jangus@skyld.tele.com | universe run by a single omni-
US Mail: PO Box 4425 Carson, CA 90749 | potent god. I see it more as a
Phone: 1 (310) 324-6080 | badly run corporation."

1155. Re: Ramsey TNC kit for use with IBM PC, any

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-21 00:07:39 UTC
From: raymonda@uranium.EBay.Sun.COM
Message-ID: <2f5eob$7be@male.EBay.Sun.COM>
Source record: 50692

In article G6G@netcom.com, fmitch@netcom.com (Felton Mitchell) writes:
.>Robert Casey (wa2ise@netcom.com) wrote:
.>: Saw the Ramsey TNC kit (the one that comes with the Baycom program) that
.>: you connect to the serial com port of your IBM PC (or clone). It gets
.>: its power from the PC. A small pc board, and a handful of parts. No
.>: adjustments it claims, as all the frequency tones are crystal locked.
.>: Halted in Silicon Valley wants $60 for it, seems a bit pricey considering
.>: the amount of parts in it.
.>
.>: How good does this kit work?

I've got one of the Ramsey TNC boards. It seems to work just fine for me.
I'm presently using it with Baycom 1.5 connected to a 12MHz AT clone with no
problems. It was basically a 'plug-n-play' operation. I built the kit and it worked
the first time.

Ray WB6TPU
raymonda@uranium.ebay.sun.com

1156. TAPR office changes

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-21 05:36:04 UTC
From: w6swe@w6swe.tapr.ORG
Message-ID: <362@w6swe.tapr.org>
Source record: 50694

```
The TAPR office is moving and will be closed until January 11,
1994. Mail to the existing address will be forwarded for some
time, but our new mailing address will be:

Tucson Amateur Packet Radio Corp.
8987-309 E. Tanque Verde Rd #337
Tucson, Az 85749-9399

New telephone numbers will be announced prior to the January 11
reopening of the TAPR office.

------------------
Bob Nielsen, W6SWE Internet: w6swe@tapr.org
Vice President, TAPR Amateur IP: 44.124.12.16
Tucson, AZ ax.25: w6swe@wb7tls.az.usa.na
```

1157. Q's on e-mail to packet & MSYS v1.16

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-21 16:13:32 UTC
From: adamstr@cc.uvcc.edu
Message-ID: <1993Dec21.091332.1@cc.uvcc.edu>
Source record: 50696

Hello all...

I have a couple of questions about packet radio, ie. how can I send an e-mail message on the internet and have it reach my friends TNC? (hope thats the right term). I'm sorry for wasting bandwidth if this has been discussed before. I've looked high and low through all of the FAQ's that I've found in r.r.a.* with no luck. If anyone has any information/FAQ that would show me how to do this, could you please forward it on to me? Thanks.

Next question - I was over at my friends place the other day and we were looking through some information on a packet bulletin board that he accesses. He found an entry that discussed the availability of MSYS v. 1.16. We noticed that it looked to be available via anonymous FTP from ???.csuohio.edu (i can't remember what the first part was... :( ). I was able to telnet to that site, but was not able to log in to do the FTP. If anyone knows whether this really available via anonymous FTP, could you please provide me with the site and log-in requirements? Thanks again.

Please e-mail, since I don't get the chance to read the net-news regularly.

Tracy - KB7YAP
adamstr@cc.uvsc.edu

1158. Re: TNC for CB Frequecies

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-21 16:15:06 UTC
From: holland@gasmac.dom.uab.edu
Message-ID: <holland-211293102028@right.dom.uab.edu>
Source record: 50695

In the CB frequency allocation there are some frequencies that
are skipped in the channel designations. If you have a synthesized
rig you could program the PLL to use one of those frequencies which
would put you off the "voice channels". Note that such a modification
is illegal, though.

Steve Holland

1159. Re: Request info on Packet

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-21 19:08:17 UTC
From: painter@bgking.zso.dec.com
Message-ID: <2f7hj1$6cv@usenet.pa.dec.com>
Source record: 50697

In article <msanders-171293171407@msanders.sim.es.com> msanders@sim.es.com (Milt Sanders) writes:
\In article <2eo7hn$6ph@uplherc.upl.com>, robertm@uplherc.upl.com wrote:
\> Hello,
\> I live in Portland, OR. I was wondering if there is anyone in my area
\> that is using packet radio and might be able to give me a few pointers
\> on how to get started and what is required. .. some deleted.....
\> Rob Mohr
\Rob:
\Suggest you pick up one of the books on packet. ARRL has one, "Your Packet
\Companion", and there are 4-5 more. That one is only about $8 and will be
\something you can reference as you go along.
\Milt

You could also pick up the NAPRA Notebook at Portland Radio Supply.
Or Mail info requests to
NAPRA
PO Box 70405
Bellevue, WA

Take care,
John "Tjp" - N0NDO

1160. Radio Packeteer in the NorthWest

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-21 21:29:35 UTC
From: iskandar@u.washington.EDU
Message-ID: <Pine.3.89.9312211350.A27097-0100000@mead.u.washington.edu>
Source record: 50698

Hello all

I am looking for tips on setting up a radio packet node.

Is any one of us in Washington State, Oregon or Idaho ?

Thanks

Alex Khalil iskandar@u.washington.edu
Grad EE U. of Washington

1161. Yaesu CAT software

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-22 06:54:24 UTC
From: "Seth M. Dworken" <p00123@psilink.com>
Message-ID: <2965618306.0.p00123@psilink.com>
Source record: 50700

I'm trying to locate DOS and Windows software to operate the Yaesu FT767GX via the CAT port. If anyone knows of any, I'd appreciate if you would forward the info.

Many thanks!

73 and Happy Holidays - Seth

1162. TAPR DCD time constants

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-22 07:05:16 UTC
From: "Seth M. Dworken" <p00123@psilink.com>
Message-ID: <2965618514.1.p00123@psilink.com>
Source record: 50701

I've just installed an MFJ 2400 baud modem into my PK232 which has the TAPR DCD mod. After lots of headaches, it's basically working; i.e. the data, clock, PTT and DCD signals are (finally!) interfaced properly.

BTW the headaches were due to incorrect/incomplete/contradictory documentation for the modem board. (I'm gonna give it one last shot to try to get a schematic from MFJ for the exact rev. board that I have...)

The only problem remaining is that it sometimes misses packets which, I think, is due to the DCD time constants for 1200 being too slow for 2400.

Can anyone suggest what needs to be changed on the DCD board and what it would need to be changed to? Am I correct to assume that nothing on the PK232 needs to be changed?

All suggestions gratefully accepted!

73 and Happy Holidays - Seth

1163. rec.radio.amateur.digital.misc Frequently Asked Questions

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-22 09:35:07 UTC
From: steve@wattres.SJ.CA.US
Message-ID: <digital-faq-1-756552901@wattres.SJ.CA.US>
Source record: 50707
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.info,rec.answers,news.answers

```
Posted-By: auto-faq 3.1.1.4
Archive-name: radio/ham-radio/digital-faq

Frequently Asked Questions for Digital Amateur Radio
(Well, it's still mostly just packet...)

$Id: packet-faq.1,v 1.3 1993/12/22 09:33:23 steve Exp $

This document is for unlimited distribution.

Please send corrections and additions to:
digital-faq@wattres.sj.ca.us
Which will expand to a list of people who are familiar with most digital
issues. I hope. ;-)

The Digital Radio FAQ list will be posted on a monthly basis to
rec.radio.amateur.digital.misc, rec.radio.info, rec.answers, and news.answers.
The current version of this document is available via anonymous FTP at
ftp.cs.buffalo.edu.

Many FAQ's, including this one, are available on the archive site
rtfm.mit.edu in the directory pub/usenet/news.answers. The name under
which a FAQ is archived appears in the Archive-Name: line at the top
of the article. This FAQ is archived as radio/amateur/digital-faq.

There is also a mail server on rtfm.mit.edu, which can be addressed as
mail-server@rtfm.mit.edu. For details on how to operate this server,
send a message to that address with the word "help" in the BODY of the
message.

Table of contents:

1 Basic Packet Radio Information
1.1 What is packet radio?
1.2 What is amateur radio?
1.3 What can I do on packet radio?
1.4 Why packet over other digital modes?
1.5 What elements make up a packet station?
TNC (Terminal Node Controller)
Computer or Terminal
A radio
1.6 What do you mean we can all use the same channel?
1.7 What is AX.25 ?
1.8 What is RTTY ?
1.9 What is AMTOR ?
1.10 Definitions: Commonly used terms in Amateur Packet Radio
```

1.11 Do's and Don'ts : Rules and Regulations

2 Computing Network Resources for Amateur Digital radio
2.1 What Newsgroups/mailing lists are available?
2.2 What anonymous FTP sites and mail servers are available?
2.3 How do I contact the ARRL through email?
2.4 Are there any gateways for mail or news
2.4.1 The W2XO Internet mail <-> packet mail gateway
2.4.2 The N0ARY Internet mail <-> full packet BBS gateway
2.4.3 The N6QMY Internet mail <-> full packet BBS gateway
2.4.4 LAN Gateways (Packet wormholes via Internet)

3 Networking and special packet protocols
3.1 Are there any other protocols in use other than AX.25?
3.2 What is TCP/IP?
3.3 How do I get an IP address?
3.4 Networking Schemes
What are some of those other networking schemes?
Digipeaters
KA-Nodes
NET/ROM
ROSE
3.5 BBS message transfer

1 Basic Packet Radio Information

1.1 What is packet radio?

Packet radio is one method of digital communications via amateur radio. Packet radio takes any digital data stream and sends that via radio to another amateur radio station. Packet radio is so named because it sends the data in small bursts, or packets.

1.2 What is amateur radio?

Amateur Radio (sometimes called Ham Radio) is individuals using specified radio frequencies for personal enjoyment, experimentation, and the continuation of the radio art. Amateur radio operators must be licensed by their government. In the United States, the Federal Communications Commission issues amateur radio licenses. Normally, a test on operating practices, radio theory, and in some cases Morse code proficiency test is administered. Amateur radio is not to be used for commercial purposes. Also, amateur radio operators are restricted from using profanity and using amateur radio for illegal purposes.

For more information on Amateur Radio in general, see the monthly frequently asked questions (FAQ) posting in rec.radio.amateur.misc. A copy of that FAQ is also available for FTP from ftp.cs.buffalo.edu and by mail from rtfm.mit.edu.

1.3 What can I do on packet radio?

Keyboard-to-Keyboard contacts:

Like other digital communications modes, packet radio can be used to talk to other amateurs. For those who cannot use HF frequencies, two amateurs can talk to each other from long distances using the packet radio network.

Packet BBS operations:

Many cities have one or more packet Bulletin Board System (BBS) available on the local packet network. Amateurs can check into the BBSes and read messages from other packet users on almost any topic. BBSes are networked together over the packet network to allow messages to reach a broader audience than just your local BBS users. Private messages may also be sent to other packet operators, either locally or who use other BBSes. BBSes have the latest ARRL, AMSAT, and propagation bulletins. Many BBSes have a file section containing various text files full of information on amateur radio in general.

DX Packet Cluster:

A recent development is use of packet radio for DX spotting. HF operators connect to the local DX Packet Cluster for the latest reports on DX. Often a user will 'spot' some hot DX and distribute the DX report real time.

File Transfer:

With special software, amateurs can pass any binary files to other amateurs. Currently, this is done with TCP/IP communications, YAPP, and other specialized protocols.

Satellite Communications:

Many of the amateur radio satellites contain microcomputer systems that can provide special information to amateurs. Some satellites contain CCD cameras on board and you can download images of the earth and the stars. Others provide store and forward packet mailboxes to allow rapid message transfers over long distances. Some satellites use AX.25, some use special packet protocols developed for satellite communications. A few transmit AX.25 packets over FM transmitters, but most use SSB transmissions.

1.4 Why packet over other digital modes?

Packet has three great advantages over most of the other digital modes: transparency, error correction, and automatic control.

The operation of a packet station is transparent to the end user; connect to the other station, type in your message, and it is sent automatically. The Terminal Node Controller (TNC) automatically divides the message into packets, keys the transmitter and sends the packets. While receiving packets, the TNC automatically decodes, checks for errors, and displays the received messages. In addition, any packet TNC can be used as a packet relay station, sometimes called a digipeater. This allows for greater range by stringing several packet stations together.

Packet radio provides error free communications because of built in error detection schemes. If a packet is received, it is checked for errors and will be displayed only if it is correct.

With VHF/UHF packet, many countries allow packet operators to operate in automatic control mode. This means that you can leave your packet station on constantly. Other users can connect to you at any time they wish to see if you are home. Some TNC's even have Personal BBSes (sometimes called mailboxes) so other amateurs can leave you messages if you are not at home.

The most important advantage of packet over other modes is the ability for many users to be able to use the same frequency channel simultaneously. No other digital mode yet gives this ability.

1.5 What elements make up a packet station?

TNC (Terminal Node Controller): A TNC contains a modem, a CPU, and the associated circuitry required to convert between RS-232 and the packet radio protocol in use. It assembles a packet from some of the data on the serial line, computing an error check (CRC) for the packet, modulates it into audio frequencies, and puts out appropriate signals to transmit that packet over the connected radio. It also reverses the process, translating the audio that the connected radio receives into a byte stream on the RS-232 port.

Most TNC's currently use 1200 BPS (bits per second) for local VHF and UHF packet, and 300 BPS for longer distance, lower bandwidth HF communication. Higher speeds are available for use in the VHF, UHF, and especially microwave region, but they often require unusual hardware and drivers.

Computer or Terminal: This is the user interface. A computer running a terminal emulator program, a packet-specific program, or just a dumb terminal can be used. For computers, almost any phone modem communications program can be adapted for packet use, but there are also customized packet radio programs available.

A radio: For 1200 BPS UHF/VHF packet, commonly available narrow band FM voice radios are used. For HF packet, 300 BPS data is used over single side band modulation. For high speed packet (anything greater than 1200 BPS), special radios or modified FM radios must be used.

1.6 What do you mean we can all use the same channel?

Packet radio uses a protocol called AX.25. AX.25 specifies channel access (ability to transmit on the channel) to be handled by CSMA (Carrier Sense Multiple Access). If you need to transmit, your TNC monitors the channel to see if someone else is transmitting. If no one else is transmitting, then the TNC keys up the radio, and sends its packet. All the other stations hear the packet and do not transmit until you are done. Unfortunately, 2 stations could accidentally transmit at the same time. This is called a collision. If a collision occurs, neither TNC will receive a reply back from the last packet it

sent. Each TNC will wait a random amount of time and then retransmit the packet.

In actuality, a more complex scheme is used to determine when the TNC transmits. See the "AX.25 Protocol Specification" for more information.

1.7 What is AX.25?

AX.25 (Amateur X.25) is the communications protocol used for packet radio. A protocol is a standard for how two computer systems are to communicate with each other, somewhat analogous to using business format when writing a business letter. AX.25 was developed in the 1970's and based of the wired network protocol X.25. Because of the difference in the transport medium (radios vs. wires) and because of different addressing schemes, X.25 was modified to suit amateur radio's needs. AX.25 includes a digipeater field to allow other stations to automatically repeat packets to extend the range of transmitters. One advantage of AX.25 is that every packet sent contains the sender's and recipient's amateur radio callsign, thus providing station identification with every transmission.

1.8 What is RTTY?

RTTY (Radio TeleTYpe) is one of the more common communications protocols used in the HF bands. It is a half-duplex, non error-correcting mode that can be used by any number of stations on a frequency in a round-table fashion. Note that transmit/receive switching is manual, so all parties in a roundtable need to agree on who transmits next. It is primarily used for single keyboard-to-keyboard contacts. RTTY uses Baudot character encoding (also known as ITA2), which is a 5 bit code. Those who can do advanced math ;) will note that 5 bits is only 32 possible combinations, which is not enough for a full alphanumeric set, much less mixed-case alphabetics. Baudot (and RTTY) gets around this limitation by defining two "shifts" which switch between a "letters case," and a "figures case." On older RTTY setups (ones which actually use a teletype, for instance), you have to worry about the letters/figures shift. However, most TNCs and multimode digital controllers now do the "Right Thing(TM)" with respect to those shift characters, sending them as necessary for the data being transmitted. Lower case is not used on Baudot RTTY. ASCII can be used in RTTY as well, but it is very uncommon.

1.9 What is AMTOR?

AMTOR (AMateur Teleprinting Over Radio) is an error-correcting protocol used in the HF bands. It uses the same character set as Baudot (ITA2), but is encoded differently, so that each character has a constant mark to space ratio. This constant ratio is how errors are detected. Errors are corrected via either of two methods: ARQ (Automatic Retransmit reQuest), and FEC (Forward Error Correction).

In ARQ mode, exactly two stations connect to each other. The station with data to transmit (also known as the Information Sending Station, or

ISS) transmits 3 characters, and then waits for the other station (called the Information Receiving Station, or IRS) to send back an acknowledgment that those 3 characters were correctly received. This back-and-forth activity makes for the characteristic "chirp-chirp-chirp" of AMTOR ARQ operation. This also means that each transceiver needs to be able to switch from sending to receiving mode fairly quickly. The first time that you operate AMTOR ARQ with a relay-switched rig, you will be convinced that the rig is going to self-destruct. ;)

In FEC mode, one station can communicate with many others at once, since there is no back-and-forth acknowledging of data. FEC gets its error correction from time diversity, which is a fancy way of saying it sends each character twice. Actually, it interleaves the characters, so that the character is not repeated until 4 character times later. An example:
The text string to send is "This is FEC."
What comes out of the controller looks like "ThisThisis Fis FEC._EC._"
The receiving controller looks for which of the characters have a proper mark to space ratio, and prints the one that does. If neither do, it prints an error symbol.

1.10 Definitions: Commonly used terms in Amateur Packet Radio

44 net - The class A network designator for TCP/IP amateur packet radio. All numerical TCP/IP addresses on packet radio should be in the format 44.xxx.xxx.xxx.

AFSK - Audio Frequency Shift Keying. A method of representing digital information by using different audio frequencies modulated on a carrier.

AMPR - Amateur Packet Radio.

ampr.org - The high level domain recognized on Internet for amateur packet radio TCP/IP.

AMTOR - AMateur Teleprinting Over Radio. This protocol allows error-free point-to-point or multicast, single user per channel communications. Usually used on HF, but not VHF or above.

ARQ - Automatic Resend reQuest. This is the point-to-point error correcting mode for AMTOR. It works by sending bursts of 3 characters, and then the other station sends an OK/NotOK code for those 3 characters.

AX.25 - Amateur X.25 protocol. The basis of most packet systems. See section 1.7 for more information.

CRC - Cyclic Redundancy Check. The error detection scheme included in each packet. Verify that the packet was received error free.

CSMA - Carrier Sense Multiple Access. A system allowing many stations to use the same radio frequency simultaneously for packet communications.

digi - Short name for a digipeater

digipeater - A packet radio station used for repeating packets. See section 3.3.1 for more information.

FCC - Federal Communications Commission. Regulates and issues licenses for amateur radio in the United States.

FEC - Forward Error Correction. This is the multicast method of (almost) error-corrected communications on AMTOR. It works by sending each character twice.

FM - Frequency Modulation. The radio modulation scheme used for VHF and UHF packet communications.

FSK - Frequency Shift Keying. A method of representing digital information by shifting the radio carrier frequency different amounts to represent ones and zeros.

HDLC - (High-Level Data Link Control Procedures) A standard for high level link control. (ISO 3309)

KA9Q NOS - (KA9Q Network Operating System) A TCP/IP program originally developed by Phil Karn, KA9Q. Currently there are many different versions available. See section 3.2 for more information.

KA-Node - A simple networking scheme developed by TNC maker Kantronics. See section 3.3.2 for more info.

KISS - Keep It Simple Stupid. A simple interface developed for communications between TNCs and computers. This allows for most of the packet processing to be handled by the computer. Commonly used with packet TCP/IP software.

LAN - Local Area Network. A packet network developed for communications throughout a city or region. Often, the LAN uses separate frequencies from inter-city packet links.

modem - MODulator/DEModulator. Converts the analog signals into a binary data stream (a series of ones and zeros) for the TNC or a micro-computer. First step in decoding packets. It also converts binary data to analog, which is the last step in encoding packets.

NET/ROM - A scheme for packet radio networking. See section 3.3 for more information.

NODE - A network node. Often a network node running NET/ROM.

PPP - Point to Point Protocol. PPP is another protocol used for moving IP frames over a serial line. It supports host authentication, and non-transparent serial lines. It also has a standard way of negotiating header (and potentially data) compression over the line. See also SLIP.

protocol - A standard used for intercommunication between different computer systems.

RS-232 (RS-323C) - A (more or less) standard for interconnection of serial peripherals to small computer systems. In packet radio,

RS-232 is the most common interface between TNC's and the Computer/Terminal.

RTTY - Radio TeleTYpe. This protocol allows point-to-point or multicast, single user per channel communications, without error correction.

SLIP - Serial Line Internet Protocol. A trivial protocol for putting IP frames over a serial line to do (potentially) cheap TCP/IP networking. Approximately the same as KISS, except over wireline networks. See also PPP.

SSB - Single Side Band. The radio modulation scheme used for HF packet and satellite packet communications.

TAPR - Tucson Amateur Packet Radio. Was the first group to create a packet radio TNC using AX.25. Soon a TAPR TNC became cloned by many others. TAPR continues development of packet radio equipment.

TCP/IP - Transmission Control Protocol/Internet Protocol. A set of utility programs used over AX.25. See sections 3.2 for more information.

TNC - Terminal Node Controller. See section 1.5 for more information.

1.12 Do's and Don'ts : Rules and Regulations

NOTE: These regulations apply only to amateurs regulated by the FCC (United States), but often are similar to regulations in other countries.

[Since I have no experience with amateur radio in other countries, I cannot make any comments. Please bring any notable exceptions to my attention. -ed]

Although there are no specific rules that apply to amateur packet radio, the general amateur radio rules force some restrictions on packet usage.

Can I set up a TNC at home and one at work so I can check my Electronic mail via packet?

This cannot be done without special restrictions. Amateur radio rules prohibit any business. Since you could have mail from your boss (or maybe even someone selling you something over Internet), that would constitute business activity and is specifically prohibited.

Profanity can also be a complication. Since you have no control over the language used in E-mail, proper filtering is required. Since no filter scheme can catch every offense, it is best to say every message must be hand filtered.

I would like to set up a packet radio gateway between a land line computer network and the packet network. Is this possible?

Yes, and there are several such gateways in use, but they must be managed with caution. Electronic mail may be passed FROM the packet network INTO the land line network without intervention. However, mail passed TO packet radio is considered third party traffic (the sender is not an amateur) and these messages must be hand filtered to ensure that rules of message content are followed.

It's my license if I use packet radio illegally anyway, so what does anyone else care!?

Packet radio is one of the few NETWORKED systems in amateur radio. Many people have helped develop the network and there are many amateurs who own parts of the packet radio network. Sending packet BBS mail, digipeating, and sharing the channel involves the licenses of MANY people. Because of FCC rules stating that anything to come out of a transmitter (either in automatic mode or via your direct control) is the licensee's responsibility, one illegal message sent over the packet radio network could literally jeopardize the licenses of thousands of other amateurs. When in doubt, it is best to check with other amateurs about sending the message before it is sent.

I have some ideas on how to use packet radio in a new way, but I don't know if it is legal. Who could tell me if I can do it legally?

The worst thing you can do is talk to the FCC about such an issue. The FCC rules are written to be general enough to encompass but not restrict new radio activities. In the past, any non-thought-out requests sent to the FCC have meant a reduction of privilege for all amateur radio operators.

The best source for legal assistance is your national amateur radio association. In the United States, that is the American Radio Relay League (ARRL). Another good place for such conversations is over Usenet/packet mailing lists, or the amateur radio BBS network.

2 Computing Network Resources for Amateur Packet radio

This section summarizes the resources available on Internet for amateur packet radio operators.

2.1 What Newsgroups/mailing lists are available?

This is a list of all groups that regularly discuss amateur packet radio. For newsgroups, join the group through use of your news reader. For mailing lists, add a '-request' to the end of the list name to request subscriptions. For listserv groups, send mail to 'listserv' at the node which contains the list. The first line of the mail should be 'SUBSCRIBE groupname yourname'. Send the command 'help' for more information.

rec.radio.amateur.packet (Newsgroup): General discussions involving Packet Radio. This group was deleted on 21 September 93!

rec.radio.amateur.digital.misc (Newsgroup): General discussions about all aspects of digital transmissions over Amateur Radio. This group is a replacement for rec.radio.amateur.packet.

rec.radio.amateur.equipment (Newsgroup): May contain discussions about equipment related to digital amateur radio, specifically HF rigs that are good for HF digital modes, and the like.

rec.radio.amateur.homebrew (Newsgroup): Contains discussions on making your own gear, which includes packet, AMTOR, and RTTY equipment.

rec.radio.amateur.misc (Newsgroup): General amateur radio discussion. Usually does not contain any particular information about Digital Amateur Radio.

rec.radio.amateur.policy (Newsgroup): Discussion of regulation policies regarding every aspect of amateur radio. Occasionally deals with policies of packet coordination and legal issues of packet radio.

rec.radio.swap (Newsgroup): General For-Sale for any radio equipment. Occasionally will have packet equipment for sale. Recommended location for any amateur packet radio for-sale items.

info-hams@ucsd.edu (Listserv group): A digest redistribution of the rec.radio.amateur.misc Usenet discussion.

packet-radio@ucsd.edu (Listserv group): General discussions involving packet radio and packet-related issues.

ham-digital@ucsd.edu (Listserv group): A digest redistribution of the rec.radio.amateur.digital.misc Usenet discussion.

ham-policy@ucsd.edu (Listserv group): A digest redistribution of the rec.radio.amateur.policy Usenet discussion

hs-modem@wb3ffv.ampr.org (Mailing list): Discussion of high speed modems and radios available and future plans. Also includes discussion of networking using high speed modems. This list is not very active.

tcp-group@ucsd.edu (Mailing list): Group discussion of technical developments of TCP/IP over packet radio and use of the NOS TCP/IP programs.

gateways@uhm.ampr.org (Mailing list): Discussion of current gateways and future plans for gateways. May deal with sensitive internetworking issues.

listserv@knuth.mtsu.edu has several interesting mailing lists available:

GRAPES-L Discussions with GRAPES (Georgia Radio Amateur Packet Enthusiasts Society) on 56kb WAN's and the WA4DSY 56kb RF modem that they distribute.

TENNET-L Tennessee's efforts at a coordinated high-speed RF packet network

GRACILIS-L Discussions on Gracilis tcp/ip packet equipment.
Includes some of the people from Gracilis.

KA9Q-UNIX Discussions on porting and using various versions
of KA9Q Unix/Xenix NET/NOS under any of a variety
of Unix/Xenix variants.

TNV-HAMS General discussions among email connected
amateur radio operators in and surrounding
Tennessee

Send a message with a body of "HELP" to get help from the list server. Also,
Internet users may now INTERACTIVELY work with the Listserv there by:

telnet knuth.mtsu.edu 372

or

telnet 161.45.1.1 372

For all lists at ucsd.edu, archives may be found via anonymous FTP at
ucsd.edu. Some listserv groups also have archives. Send the command
'help' to the group's listserv for more information. Digest mailings
for the ucsd.edu discussions are also available. Send mail to
listserv@ucsd.edu with the first line being 'longindex' for more
information.

Terry Stader (KA8SCP) <tstader@aol.com> maintains a list of Mac
packet-related software, and posts it periodically (somewhat less often
than monthly) to rec.radio.amateur.digital.misc.

Carl Trommel <carl@codewks.nacjack.gen.nz> posts the weekly news bulletin
of the ZL Data Group to rec.radio.amateur.digital.misc. This bulletin
covers the current happenings in New Zeland's packet network.

There appears to be a mailing list about NOS on hydra.carleton.ca, but
I don't have much more detail. Send a message to
nos-bbs-request@hydra.carleton.ca. The list name is nos-bbs@hydra.carelton.ca.

2.2 What anonymous FTP sites and electronic mail servers are available
for getting packet radio information and programs?

This is a sampling of FTP sites that carry amateur packet radio related
files. Consult the Archie archive server for info on locating
particular files. For more information on using Archie, send mail to
archie@cs.mcgill.edu with the line 'help'.

ucsd.edu

Primary distribution site of KA9Q's derived TCP/IP packages. Also,
general packet radio information in the /hamradio/packet subdirectory.
UCSD is also the home of the Amateur Radio "Requests For Comments"
directory. If you write something that you believe could be included
in this directory (for example, a specification of AX.25, or maybe some
other protocol that nobody's thought of before) contact Brian Kantor
(brian@ucsd.edu) and let him know.

wuarchive.wustl.edu

Very large collection of amateur radio software. This stuff used to
be on wsmr-simtel20.army.mil, but that system (and service) was
discontinued as of 1 Oct 93 for budgetary reasons. WUArchive used
to "just" mirror Simtel20, and still has all the files that were
on Simtel20 when it shut down.

ftp.cs.buffalo.edu

Supplemental archive site for amateur radio information. Contains
current copies of all rec.radio.amateur.* FAQ's.

tomcat.gsfc.nasa.gov

Packet software including Baycomm, ROSE, G8BPQ, NOS, etc.
(I have one report (from George Hitz, W1DA) that this FTP site will be
down until the end of this summer, 1993. Reportedly the site admin is
going to be in Sweden.)

akutaktak.andrew.cmu.edu

SoftKiss for the Mac, in /aw0g. Requires NET/Mac.
SoftKiss is an init/cdev/driver that allows a MAC to do packet using
a Poor Man's Packet modem.

sumex-aim.stanford.edu

NET/Mac is the port of KA9Q's NET program. It doesn't have nifty features
like scrolling or saving the windows, but the individual sessions can be
recorded into a file.

As for mail servers, there is only one that I know of at the moment:

Ham-Server@GRAFex.Cupertino.CA.US

This mail server, which is run by Steve Harding (KA6ETB), has a wide
variety of information on most aspects of amateur radio, not just digital
modes. Send a message with the body HELP to get a fairly useful listing.
Also note that Steve posts the index from the server approximately weekly
to rec.radio.amateur.misc, rec.radio.amateur.digital.misc, and sbay.hams.

2.3 How do I contact the ARRL via electronic mail?

There are various addresses at ARRL HQ, but the most important one is
probably info@arrl.org. That is where general information about the
ARRL can be acquired. This address reaches a person, so you'll have
to specify what/who you're looking for.

2.4 Are there any gateways for mail or news between Internet and
Amateur Packet radio?

Internet / Packet Radio BBS Gateways

There are currently two comprehensive gateways between the Internet and
the packet radio BBS system. One is run by Jim Durham, W2XO, in Pennsylvania
and the other, which allows access to PBBS bulletins, as well as mail,

is run by Bob Arasmith, N0ARY, in California.

2.4.1 The W2XO Gateway

To mail from Internet to Packet:

1. Mail to: "bbs@w2xo.pgh.pa.us"

2. Make the first line of the text a Packet BBS "send" command, i.e.:
SP TOCALL @ BBSCALL.ROUTING-HINTS < FROMCALL

3. The "subject" line of the Internet mail becomes the "title" line
of the Packet BBS mail.

NOTE: Because of FCC regulations, Jim must hand filter each message
sent FROM Internet TO the Amateur Packet Radio BBS system. Messages
should be of minimal length and appropriate content. Read Section 1.9
(Do's and Don'ts: Rules and Regulations) regarding appropriate usage of
packet radio for more information. Always include the routing hints
with the BBS callsign.

To mail from Packet to Internet:

1. The amateur radio operator must have his callsign registered in
the gateway alias list. If you want to mail from packet to a specific
amateur on Internet, send mail to 'durham@w2xo.pgh.pa.us' (Internet) or
'W2XO @ W2XO.#WPA.PA.USA.NOAM' (Packet BBS mail) with his/her amateur
callsign and their Internet address.

2. Once the above is accomplished, packet BBS mail should be sent to
'CALL @ W2XO.#WPA.PA.USA.NOAM'. The mail will automatically be
forwarded to the Internet address of the amateur with the 'CALL'
callsign.

Jim Durham's Internet address is 'durham@w2xo.pgh.pa.us'.

2.4.2 The N0ARY Internet mail <-> full packet BBS gateway

Bob Arasmith, N0ARY, runs a gateway between the Internet mail system and
the PBBS system. His gateway allows you to read, post, and respond to other
postings on the PBBS system via email. For more information, send mail
to gateway_info@arasmith.com.

2.4.3 The N6QMY Internet mail <-> full packet BBS gateway

Patrick Mulrooney, N6QMY, also runs a gateway between the Internet mail
system and the PBBS system. His gateway allows you to read, post, and
respond to other postings on the PBBS system via email. For more
information, send mail to gateway-info@lbc.com.

Users are required to register with the gateway to allow automatic forwarding
of mail from the Internet to Packet. No registration is needed to send
mail from Packet to the Internet. To register, send the following
information to gateway-request@lbc.com:
CALL:

FIRST NAME:
LAST NAME:
CITY & ST:
COUNTRY
ZIP:
HOME BBS:

2.4.4 LAN Gateways (Packet wormholes via Internet)

Currently a group of amateurs are experimenting with connecting packet LANs together via Internet IP inside IP Encapsulation. Some of the gateways only accept TCP/IP packets, others AX.25 packets. These gateways uses the Internet as a transport medium, thus it is impossible to access the packet radio network from Internet. For more information, join the Gateways mailing list by sending mail to "gateways-request@uhm.ampr.org".

3 Networking and special packet protocols

This is a sample of some of the more popular networking schemes available today. By far, there are more customized networking schemes used than listed. Consult your local packet network guru for specific network information.

3.1 Are there any other protocols in use other than AX.25?

AX.25 is considered the defacto standard protocol for amateur radio use and is even recognized by many countries as a legal operation mode. However, there are other standards. TCP/IP is used in some areas for amateur radio. Also, some networking protocols use other packet formats than AX.25.

Often, special packet radio protocols are encapsulated within AX.25 packet frames. This is done to insure compliance with regulations requiring packet radio transmissions to be in the form of AX.25. However, details of AX.25 encapsulation rules vary from country to country.

3.2 What is TCP/IP?

TCP/IP stands for Transmission Control Protocol/Internet Protocol. This is commonly used over the Internet wired computer network. The TCP/IP suite contains different transmission facilities such as FTP (File Transfer Protocol), SMTP (Simple Mail Transport Protocol), Telnet (Remote terminal protocol), and NNTP (Net News Transfer Protocol)

TCP/IP doesn't use all of the AX.25 protocol. Instead, it uses special AX.25 packets called Unnumbered Information (UI) packets and then puts its own special protocol (called IP) on top of AX.25. This is used to increase efficiency of its transmissions, since IP does not require packets to be "reliable", that is to say, guaranteed delivered error-free. TCP handles the retransmission of lost and garbled packets in its own way, at a higher level. Therefore the extra information in

an AX.25 "VC" (virtual circuit) frame is not useful, and thus consuming needed bandwidth.

The KA9Q NOS program (also called NET) is the most commonly used version of TCP/IP in packet radio. NOS originally was written for the PC compatible. However, NOS has been ported to many different computers such as the Amiga, Macintosh, Unix, and others. Smaller computers like the Commodore 64 and the Timex-Sinclair do not currently have version of NOS available.

For more general information about IP (not necessarily over packet radio), try the newsgroup comp.protocols.tcp-ip, and any of the plethora of books on the subject. I have found the various books by Douglas Comer (the "Internetworking with TCP/IP series) to be excellent.

3.3 How do I get an IP address?

Brian Kantor (brian@ucsd.edu) is the IP address coordinator for the AMPR.ORG domain, also known as the "44 net." Brian (sensibly enough) delegates coordination for each state to sub-coordinators. This list(*) of coordinators is available via FTP from ftp.cs.buffalo.edu:/pub/ham-radio/ampr_coordinators.

(*) The coordinator list doesn't have e-mail addresses. If you're willing to do the legwork required to gather them, please contact Brian Kantor.

3.4 Networking Schemes

What are some of those other networking schemes?

During the early days of amateur packet radio, it became apparent that a packet network was needed. To this end, the following packet network schemes where created.

Digipeaters

The first networking scheme with packet radio was Digipeaters. Digipeaters would simply look at a packet, and if its call was in the digipeater field, would resend the packet. Digipeaters allow the extension of range of a transmitter by retransmitting any packets addressed to the digipeater.

This scheme worked well with only a few people on the radio channel. However, as packet became more popular, digipeaters soon were clogging up the airwaves with traffic being repeated over long distances. Also, if a packet got lost by one of the digipeaters, the originator station would have to retransmit the packet again, forcing every digipeater to transmit again and causing more congestion.

KA-Nodes

Kantronics improved on the digipeater slightly and created KA-Nodes. As with digipeaters, KA-Nodes simply repeat AX.25 frames. However, a KA-Node acknowledges every transmission each link instead of over the entire route. Therefore, instead of an end-to-end acknowledgment,

KA-Nodes allow for more reliable connections with fewer timeouts, because acknowledgments are only carried on one link. KA-Nodes therefore are more reliable than digipeaters, but are not a true network. It is similar like having to wire your own telephone network to make a phone call.

NET/ROM

NET/ROM was one of the first networking schemes to try to address the problems with digipeaters. A user connects to a NET/ROM station as if connecting to any other packet station. From there, he can issue commands to instruct the station to connect to another user locally or connect to another NET/ROM station. This connect, then connect again, means that to a user's TNC, you are connected to a local station only and its transmissions do not have to be digipeated over the entire network and risk loosing packets. This local connection proved to be more reliable.

NET/ROM is a commercial firmware (software put on a chip) program that is used as a replacement ROM in TAPR type TNC's. Other programs are available to emulate NET/ROM. Among them are TheNet, G8BPQ node switch, MSYS, and some versions of NET.

NET/ROM nodes, at regular intervals, transmit to other nodes their current list of known nodes. This is good because as new nodes come on-line, they are automatically integrated in the network. However, if band conditions such as ducting occur, ordinarily unreachable nodes can be entered into node lists. This causes the NET/ROM routing software to choose routes to distant nodes that are impossible. This problem requires users to develop a route to a distant node manually defining each hop instead of using the automatic routing feature.

ROSE

ROSE is another networking protocol derived from X.25. Each ROSE node has a static list of the nodes it can reach. For a user to use a ROSE switch, he issues a connect with the destination station and in the digipeater field places the call of the local rose switch and the distant rose switch the destination station can hear. Other then that, the network is completely transparent to the user.

ROSE's use of static routing tables ensures that ROSE nodes don't attempt to route packets through links that aren't reliably reachable, as NET/ROM nodes often do. However, ROSE suffers from the inability to automatically update its routing tables as new nodes come online. The operators must manually update the routing tables, which is why ROSE networks require more maintenance.

3.5 BBS message transfer

Many of the BBS programs used in packet radio allow for mail and bulletins to be transferred over the packet radio network. The BBSes use a special forwarding protocol developed originally by Hank Oredsen,

W0RLI.

Besides full service BBSes, many TNC makers have developed Personal BBS software to allow full service BBSes to forward mail directly to the amateur's TNC. This allows operators to receive packet mail at night and avoid tying up the network during busy hours.

1164. Re: TNC for CB Frequecies

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-22 13:27:17 UTC
From: peter@globv1.hacktic.nl
Message-ID: <1993Dec22.132717.3014@globv1.hacktic.nl>
Source record: 50705

holland@gasmac.dom.uab.edu (Steve Holland) writes:

>In the CB frequency allocation there are some frequencies that
>are skipped in the channel designations. If you have a synthesized
>rig you could program the PLL to use one of those frequencies which
>would put you off the "voice channels". Note that such a modification
>is illegal, though.

Yes, they are used for radio control of miniature aircraft, ships, cars, etc.
To put someone's precious toy aircraft at risk isn't exactly a nice thing to do.

It's much better to connect a TNC or Baycom modem to mic input/output of the
CB set. Then you can use the legal channels without modifying the set. It works
good enough for me and lots of other people.

Groetjes,
Peter Busser
--
Linux, the choice of a GNU generation.

1165. Where can I find my perfect NOS?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-22 17:00:50 UTC
From: ve1dln@nbnet.nb.ca
Message-ID: <ve1dln.121.0@nbnet.nb.ca>
Source record: 50702
Cross-posted to: rec.radio.amateur.digital.misc,comp.protocols.tcp-ip.ibmpc

I am looking for my own perfect NOS. I am without a Turbo C compiler (I have only Microsoft C), hence am left to searching for compiled versions. Many versions have parts of what I want, but none have everything. I am looking for a nos with NNTP, SMTP, PopMail, Finger, Ftp, telnet, etc. A gopher client would be nice, too. And it must support SLIP. Any help that can be offered would be appreciated.

Thanks,
Andy Silliker
VE1DLN

1166. Re: Request info on Packet

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-22 21:06:22 UTC
From: hanko@wv.mentorg.com
Message-ID: <2facse$hd1@wvhpadm1.mentorg.com>
Source record: 50703

Bob is not far from me ...
I sent him my LL, perhaps he will come and visit
and get a demo of what is available in the area.

Tons of activity in the greater Portland area !

... Hank

In article <msanders-171293171407@msanders.sim.es.com>, msanders@sim.es.com (Milt Sanders) writes:
|> In article <2eo7hn$6ph@uplherc.upl.com>, robertm@uplherc.upl.com wrote:
|>
|> >
|> > Hello,
|> >
|> > I live in Portland, OR. I was wondering if there is anyone in my area
|> > that is using packet radio and might be able to give me a few pointers
|> > on how to get started and what is required. .. some deleted.....
|> >
|> > Rob Mohr
|>
|>
|> Rob:
|>
|> Suggest you pick up one of the books on packet. ARRL has one, "Your Packet
|> Companion", and there are 4-5 more. That one is only about $8 and will be
|> something you can reference as you go along.
|>
|> Milt
|> --
|> ==
|>
|> Opinions, thoughts, &cetera are my own (when I can remember them).
|>
|> "He flies the sky KB7MSF
|> Like an Eagle in the eye UTAH
|> of a hurricane that's abandoned."
|>
|> America

--

Hank Oredson @ Mentor Graphics
Internet : hank_oredson@mentorg.com
Amateur Radio: W0RLI@W0RLI.OR.USA.NOAM

1167. Timewave DSP-9 or 59?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-23 05:45:29 UTC
From: keating@manta.nosc.mil
Message-ID: <1993Dec23.054529.1001@nosc.mil>
Source record: 50704
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.digital.misc

I'm considering the merits of the features on the Timewave DSP-59 vs
the DSP-9.

Have you any comments about these units?
email to: keating@nosc.mil

Tnx- Roger, KD6EFQ

_ . _ _ . . _ . . . . . _ . _ _ . _ . . . _ . _
Roger Keating, Cognitive Engineer PS&E keating@nosc.navy.mil | KD6EFQ
Naval Command, Control and Ocean Surveillance Center RDTE DIV | VHF DX is
NRaD Advanced Afloat System HCI - Code 44209 | Fun!
53245 Patterson Rd, San Diego CA 92152-7150 USA | Try it.

1168. Re: Timewave DSP-9 or 59?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-23 07:16:31 UTC
From: turner@safety.ics.uci.edu
Message-ID: <2fbgkf$d3@safety.ics.uci.edu>
Source record: 50706
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.digital.misc

I am also interested in the Timewave DSP-9. I am especially interested in how much real audio gets through the thing.....does it take the audio and chop it up much when it gets to the speaker? I really like my fidelity (such as it is from my 2.1 kHz filters), and would hate to make it worse, though the auto notching is a very nice feature.

Would love to hear from owners!

Clark
WA3JPG

1169. Packet addressing directory?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-23 15:20:23 UTC
From: btoback@netcom.com
Message-ID: <btobackCIHuM0.43u@netcom.com>
Source record: 50708

I'm looking for some kind of a directory to assist in addressing messages.
What I'd like to see is a directory in which one could look up, for
example, a city, and get:
1. A list of the BBSs that serve that city
2. The flood address hierarchy for the city

One could also look up a flood address and find the BBSs that contain it.

The problem I'm trying to solve is that of getting a message to a particular
geographic area when I don't already know the address for the area.
The US convention, using state postal abbreviations for flood addresses,
is fine if the area of interest is a state, and if you happen to know the
abbreviation. For someone outside the US, neither of these may be true:
the packet user may be looking for someone in Dallas, but not know the
state abbreviation for Texas or even that Dallas is located in Texas.
Similarly, I have no idea how to get a message to all BBSs in Sydney,
for example.

Does such a directory exist already? If not, would anybody on the net find
such a directory useful if it did exist? At minimum, I expect that easy
access to a directory of this sort would cut down on the number of messages
intended for one particular country that are addressed to @WW.

-- Bruce Toback
KN6MN@KC7Y.AZ.USA.NA
btoback@netcom.com

1170. Packet frame check sequence help please?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-23 16:58:18 UTC
From: andyh@fantom.demon.co.uk
Message-ID: <756665898snz@fantom.demon.co.uk>
Source record: 50709

```
--
Andrew Hall
```

1171. Communication program for packet

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-23 18:45:03 UTC
From: ee_hflo@uxmail.ust.hk
Message-ID: <1993Dec23.184503.3342@uxmail.ust.hk>
Source record: 50710

I am making my first tnc. Please tell me which communication program
for packet radio is suitable for beginners.

Michael Lo

1172. Pactor

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-23 20:30:16 UTC
From: jesse.ball@arbbs.simivalley.ca.us
Message-ID: <93122321404413@arbbs.simivalley.ca.us>
Source record: 50712

Hi All,

Is there a Pactor newsgroup?

Jess, W6BFO

1173. So near and yet so far

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-24 04:51:53 UTC
From: ad815@yfn.ysu.edu
Message-ID: <2fdsh9$ljt@news.ysu.edu>
Source record: 50711
Cross-posted to: rec.radio.amateur.digital.misc,soc.singles,alt.personals

Please forgive me for this one ... but I just had to tell SOMEONE
about this so I figure ... hey ... why stop at the planet? <<Grin>>

Yes, boys and girls ... it finally happened ... I met a young
lady ON PACKET who is ... get this ... 21, within driving distance,
and has been a ham since she was 11 YEARS OLD!

..... B U T !!!!!!!!!! ....

SHE HAS A BOYFRIEND!!!!!!!!!!!!!!

If there is a God, he is a mean, mean man ...

Oh, what a close call ...

But, hey ... if there really are eddies, currents, backwash to
time and space, the actual one can't be far away, right?
I just wonder what frequency <<Grin>>

John KB8GYS
--
John S. Kennedy | If you only had four lines to sum up
4223 Williamson Pl. | your entire life in a frightfully witty
Cincinnati, OH 45223-2111 | and eye-catching manner, how would you do it?
(513) 541-3078 |

1174. Re: So near and yet so far

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-24 09:00:57 UTC
From: myers@sunspot.West.Sun.COM
Message-ID: <2feb49INN53e@abyss.West.Sun.COM>
Source record: 50713
Cross-posted to: rec.radio.amateur.digital.misc,soc.singles,alt.personals

In article <2fdsh9$ljt@news.ysu.edu> ad815@yfn.ysu.edu (John S. Kennedy) writes:
>
>Please forgive me for this one ... but I just had to tell SOMEONE
>about this so I figure ... hey ... why stop at the planet? <<Grin>>
>
>Yes, boys and girls ... it finally happened ... I met a young
>lady ON PACKET who is ... get this ... 21, within driving distance,
>and has been a ham since she was 11 YEARS OLD!
>
>.............. B U T !!!!!!!!!!! ....
>
>SHE HAS A BOYFRIEND!!!!!!!!!!!!!

Big deal! Get your Extra and she'll dump him for you...

--
* Dana H. Myers KK6JQ, DoD 466 | Views expressed here are *
* (310) 348-6043 | mine and do not necessarily *
* Dana.Myers@West.Sun.Com | reflect those of my employer *
* This Extra supports the abolition of the 13 and 20 WPM tests *

1175. Communication program for

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-24 16:05:00 UTC
From: mario.campos@cld9.com
Message-ID: <7.1573.1394.0N5848B6@cld9.com>
Source record: 50722

Quoting EE_HFLO@UXMAIL.UST.HK to ALL concerning Communication program for:

```
+- EE_HFLO@UXMAIL.UST.HK to ALL -------------------------------------+
| |
| I am making my first tnc. Please tell me which communication program|
|for packet radio is suitable for beginners. |
+--------------------------------------------------------------------+
```

I have tried many commercial and shareware! I finally settled on a shareware prog. called - "paKet 5.1" out of Australia! Easy to set up and excellent documentation especially for beginners!

```
---------------------------------------------------------------------------
=: Mario A. Campos - N6ALS | mario.campos@nitelog.com | DXCC #24824 :=
=: Del Rey Oaks, CA 93940 | | :=
=: Monterey Peninsula | N6ALS@K6LY.#NOCAL.CA.USA.NA | WAS #33960 :=
---------------------------------------------------------------------------
```

Message written at 9:42am, on Thursday, January 3, 1980.

```
---
* [R2.00o] * Usenet * Nitelog BBS * Monterey CA * 408-655-1096
```

1176. Re: So near and yet so far

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-24 17:59:37 UTC
From: amirza@bronze.ucs.indiana.edu
Message-ID: <CIJwnD.K46@usenet.ucs.indiana.edu>
Source record: 50714
Cross-posted to: rec.radio.amateur.digital.misc,soc.singles,alt.personals

In article <2feb49INN53e@abyss.west.sun.com>,
Dana Myers <myers@sunspot.West.Sun.COM> wrote:
>In article <2fdsh9$ljt@news.ysu.edu> ad815@yfn.ysu.edu (John S. Kennedy) writes:
>>
>>Please forgive me for this one ... but I just had to tell SOMEONE
>>about this so I figure ... hey ... why stop at the planet? <<Grin>>
>>
>>Yes, boys and girls ... it finally happened ... I met a young
>>lady ON PACKET who is ... get this ... 21, within driving distance,
>>and has been a ham since she was 11 YEARS OLD!
>>
>>..... B U T !!!!!!!!!! ....
>>
>>SHE HAS A BOYFRIEND!!!!!!!!!!!!!
>
>
>Big deal! Get your Extra and she'll dump him for you...

Or start doing EME and impress her with yer antenna array...

--
Anmar Mirza #Chief of Tranquility #I thought that they were angels, much
EMT-D N9ISY #Base, Lawrence Co. IN #to my suprise, I climbed aboard their
Sawyer #Somewhere out on the #starship, and headed for the skies...
Networks Tech.#Mirza Ranch. DoD#1143 #Come sail away, come sail away with me

1177. Re: So near and yet so far

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-24 19:21:03 UTC
From: hopken@interaccess.com
Message-ID: <2fffev$l19@mailhost.interaccess.com>
Source record: 50715
Cross-posted to: rec.radio.amateur.digital.misc,soc.singles,alt.personals

Well John, wonder if you have expressed your interest?
--
==========
Ken Hopkins WA9WCP | Internet - HOPKEN@interaccess.com
Disaster Team - | AMPRnet - 44.72.1.162
American Red Cross | AX.25 - WA9WCP@W9ZMR.IL.USA

1178. Re: So near and yet so far

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-24 20:38:05 UTC
From: ad815@yfn.ysu.edu
Message-ID: <2ffjvd$bq0@news.ysu.edu>
Source record: 50716
Cross-posted to: alt.personals,rec.radio.amateur.digital.misc,soc.singles

In a previous article, amirza@bronze.ucs.indiana.edu (Anmar Caves) says:

>In article <2feb49INN53e@abyss.west.sun.com>,
>Dana Myers <myers@sunspot.West.Sun.COM> wrote:
>>Big deal! Get your Extra and she'll dump him for you...

I HAVE my Extra, son ... and I'm a VE on top of that ...

>
>Or start doing EME and impress her with yer antenna array...

I have a SIG file that used to say, "I'm cute, I'm cuddly, and
I have lots of nice, BIG antennas" <<Grin>>

It attracted attention alright <<Grin>>

Yeah ... talk about your actually kick in the head ... the packet
station that 21 year old YL was using down at her college
was actually her boyfriend's ... yike ... talk about your
Kobayashi Maru, boys and girls ...

John
--
John S. Kennedy | If you only had four lines to sum up
4223 Williamson Pl. | your entire life in a frightfully witty
Cincinnati, OH 45223-2111 | and eye-catching manner, how would you do it?
(513) 541-3078 |

1179. Re: So near and yet so far

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-24 20:47:54 UTC
From: rich@mulvey.com
Message-ID: <1993Dec24.204754.8153@mulvey.com>
Source record: 50717
Cross-posted to: rec.radio.amateur.digital.misc,soc.singles,alt.personals

John S. Kennedy (ad815@yfn.ysu.edu) wrote:

: Please forgive me for this one ... but I just had to tell SOMEONE
: about this so I figure ... hey ... why stop at the planet? <<Grin>>

: Yes, boys and girls ... it finally happened ... I met a young
: lady ON PACKET who is ... get this ... 21, within driving distance,
: and has been a ham since she was 11 YEARS OLD!

: ..... B U T !!!!!!!!!! ....

: SHE HAS A BOYFRIEND!!!!!!!!!!!!!

Yes, but "boyfriend" means different things to different people. There's
no law against dating more than one person, after all. :-)

Besides, could always invite her to see your shack and check out your
equipment. :-)

- Rich

--
Rich Mulvey Amateur Radio: N2VDS Rochester, NY
rich@mulvey.com "Full power on half a watt."

1180. help

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-24 21:12:47 UTC
From: swillens@vub.ac.be
Message-ID: <4059@rc1.vub.ac.be>
Source record: 50718

[No readable article body recovered]

1181. Re: So near and yet so far

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-24 23:25:34 UTC
From: karn@unix.ka9q.ampr.org
Message-ID: <2fftpe$e05@qualcomm.com>
Source record: 50737
Cross-posted to: rec.radio.amateur.digital.misc,soc.singles,alt.personals

In article <2feb49INN53e@abyss.West.Sun.COM>, myers@sunspot.West.Sun.COM (Dana Myers) writes:
|> In article <2fdsh9$ljt@news.ysu.edu> ad815@yfn.ysu.edu (John S. Kennedy) writes:
|> >Yes, boys and girls ... it finally happened ... I met a young
|> >lady ON PACKET who is ... get this ... 21, within driving distance,
|> >and has been a ham since she was 11 YEARS OLD!
|> >
|> >..... B U T !!!!!!!!!! ....
|> >
|> >SHE HAS A BOYFRIEND!!!!!!!!!!!!!
|>
|>
|> Big deal! Get your Extra and she'll dump him for you...

Yeah. Women simply can't resist men who can copy code at 25wpm or faster. Why do you think all we Extras so strongly favored the no-code license? To reduce the competition, of course!

:-)

Phil

1182. BPQ Software / Baycom

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-25 12:50:17 UTC
From: K.E.Walton@bradford.ac.uk
Message-ID: <1993Dec25.125017.24908@bradford.ac.uk>
Source record: 50723

Hi

Is their a version of BPQ arround somewhere that will support an external Baycom modem on com1. They all seems to suport the card, but not the external version.

Thanks

Kevin
--
//// Computer Science Student Email : K.E.Walton@Bradford.AC.UK ////
//// Bradford University Snail Mail : 38 Fieldhead Street ////
//// England Bradford, West Yorks, ////
//// Packet : G7PMO @ GB7WRG.#19.GBR.EU ENGLAND, BD7 1LP ////

1183. Re: Communication program for packet

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-25 14:35:56 UTC
From: rapp@lmr.mv.com
Message-ID: <LqB5ec3w165w@lmr.mv.com>
Source record: 50719

ee_hflo@uxmail.ust.hk (Michael Lo) writes:

> I am making my first tnc. Please tell me which communication program
> for packet radio is suitable for beginners.

Why don't you just use whatever terminal emulator you have on hand? For example, if you are using MSDOS, I believe the old standby shareware Procomm is still available, and will get you started.

Larry W1HJF

--------------------------- Seasons Greetings! ----------------------------
L. M. Rappaport & Associates, Inc. rapp@lmr.mv.com voice +1 603 237 8400
Colebrook, NH 03576-0158 CIS 72427,2567 fax +1 603 237 8430

1184. Re: Communication program for packet

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-25 16:35:12 UTC
From: hopken@interaccess.com
Message-ID: <2fhq40$jv3@mailhost.interaccess.com>
Source record: 50720

Michael Lo (ee_hflo@uxmail.ust.hk) wrote:
: I am making my first tnc. Please tell me which communication program
: for packet radio is suitable for beginners.

: Michael Lo
Hello Michael - Just about any terminal program such as Qmodem,
Procomm, etc. will do. The tnc does all the "smart" work. The software
just manages the data stream between tnc and rs232 port.
73's

--
==========
Ken Hopkins WA9WCP | Internet - HOPKEN@interaccess.com
Disaster Team - | AMPRnet - 44.72.1.162
American Red Cross | AX.25 - WA9WCP@W9ZMR.IL.USA

1185. 1278B Shareware?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-25 19:06:00 UTC
From: Jack.Anderson@f239.n109.z1.fidonet.org
Message-ID: <756848680.AA07952@blkcat.UUCP>
Source record: 50721

Does anyone know of good shareware that enables use of the MFJ-1278BT
fax, SSTV and graphics modes?

Thanks,

Jack, N4ULS

Internet: janderson@ram.net

1186. Re: TNC for CB Frequecies

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-26 00:48:08 UTC
From: mark@ve6mgs.ampr.ab.ca
Message-ID: <CIMA89.3wM@ve6mgs.ampr.ab.ca>
Source record: 50724

holland@gasmac.dom.uab.edu (Steve Holland) writes:

>In the CB frequency allocation there are some frequencies that
>are skipped in the channel designations. If you have a synthesized
>rig you could program the PLL to use one of those frequencies which
>would put you off the "voice channels".

And smack dab in the middle of some R/C channels, thank you very much ...

It is Class D CB, so I gess they would be shitting in the mouth that feeds them

Ciao -- Mark
I can't hold 'er capitan, she'sa going down. All I can hear on
the control channel is this funny repeating Breeeeeaaaaapppp sound ...

1187. Setting up a NOS Gateway on a Sparc IPC

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-26 19:40:22 UTC
From: swamik@ele.uri.edu
Message-ID: <CInqnC.BB5@egr.uri.edu>
Source record: 50725

Hi
Im trying to setup a gateway on my Sparc IPC. I had the SysOp
create a pseudo-device called /dev/tun0 and rebuild the kernel. I have no
idea what to do next. Could someone please help me!!!!!

swamik@ele.uri.edu

Swami

1188. Newbie

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-26 20:05:01 UTC
From: dreid@mailer.fsu.edu
Message-ID: <2fkqpd$mfd@mailer.fsu.edu>
Source record: 50726

I am a extremely new Ham person and would be intrested in FAQ's
or whatnot on ham... I want to learn more about radio packet
modems/networks... I know a little (about AX.25 protocols),
but I need to learn some of the more basic's.. Like whats the
best transeiver? What TNC should I use.. Where the best place
to get eq.???? Any help would be greatly appriciated. thanks!

1189. AA4RE BBS Program V2.1P

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-26 21:24:22 UTC
From: enge@enge.almaden.ibm.com
Message-ID: <2fkve6$4if@juniper.almaden.ibm.com>
Source record: 50727

Version 2.1P is now available from the usual sources. Here on the
Internet, ftp from kilroy.jpl.nasa.gov or from ucsd.edu

Roy Engehausen, AA4RE
enge@almaden.ibm.com

1190. Re: Newbie

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-27 03:48:23 UTC
From: hopken@interaccess.com
Message-ID: <2fllu7$818@mailhost.interaccess.com>
Source record: 50728

Debi Reid (dreid@mailer.fsu.edu) wrote:

: I am a extremely new Ham person and would be intrested in FAQ's
: or whatnot on ham... I want to learn more about radio packet
Hi Debbie. Try anonymous ftp to ucsd.edu then start looking around for ham
stuff. There's quite a bit there. If you have some specific questions, I'll
be happy to try and answer.
73's

--
==
Ken Hopkins WA9WCP | Internet - HOPKEN@interaccess.com
Disaster Team - | AMPRnet - 44.72.1.162
American Red Cross | AX.25 - WA9WCP@W9ZMR.IL.USA

1191. HF Gatesways Any? For Telneting from NOS

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-27 05:38:46 UTC
From: da884@cleveland.Freenet.Edu
Message-ID: <2flsd6$kfd@usenet.INS.CWRU.Edu>
Source record: 50729

I'm looking for a site which I can telnet from NOS to get onto packet on
20M, anyone have anyinfo? Help

73's de VE3TOS

ax25: ve3tos@ve3oy.#scon.on.can.noam
Ampernet: Ve3tos@ve3tos.ampr.org
ip 44.135.88.89

1192. HAM-server changes

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-27 08:10:04 UTC
From: ka6etb@GRAFex.sbay.org
Message-ID: <s4mHtAHABh107h@GRAFex.sbay.org>
Source record: 50595
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.misc,sbay.hams

The HAM-server index has undergone some radical changes. I am in process of adding descriptors to most of the files, and have moved some files around.

If you have ordered an index prior to 12/26, I suggest you re-order.

Send your request to:

HAM-server@grafex.sbay.org

In the text place

get \hamradio\index.txt

Do not reply to this post, or email to HAMSinfo.

73 de KA6ETB

1193. Re: So near and yet so far

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-27 15:59:18 UTC
From: jjd1@cbnewsg.cb.att.com
Message-ID: <CIpB2v.3t4@cbfsb.cb.att.com>
Source record: 50730
Cross-posted to: rec.radio.amateur.digital.misc,soc.singles,alt.personals

In article <2fdsh9$ljt@news.ysu.edu> ad815@yfn.ysu.edu (John S. Kennedy) writes:
>
>Please forgive me for this one ... but I just had to tell SOMEONE
>about this so I figure ... hey ... why stop at the planet? <<Grin>>
>
>Yes, boys and girls ... it finally happened ... I met a young
>lady ON PACKET who is ... get this ... 21, within driving distance,
>and has been a ham since she was 11 YEARS OLD!
>
>.............. B U T !!!!!!!!!!! ....
>
>SHE HAS A BOYFRIEND!!!!!!!!!!!!!!
>
>If there is a God, he is a mean, mean man ...
>
>Oh, what a close call ...
>
>But, hey ... if there really are eddies, currents, backwash to
>time and space, the actual one can't be far away, right?
>I just wonder what frequency <<Grin>>

About that comedy club stint? Did it go that badly?

==========
Steatopygias's 'R' Us. doh#0000000005 That ain't no Hottentot.
Sesquipedalian's 'R' Us. ZX-10. AMA#669373 DoD#564. There ain't no more.
"There is no cure for birth and death, save to enjoy the interval."
- Santanaya
==========

1194. Re: So near and yet so far

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-27 16:10:11 UTC
From: msanders@sim.es.com
Message-ID: <msanders-271293091011@msanders.sim.es.com>
Source record: 50731

In article <2fdsh9$ljt@news.ysu.edu>, ad815@yfn.ysu.edu (John S. Kennedy) wrote:

>
> Please forgive me for this one ... but I just had to tell SOMEONE
> about this so I figure ... hey ... why stop at the planet? <<Grin>>
>
> Yes, boys and girls ... it finally happened ... I met a young
> lady ON PACKET who is ... get this ... 21, within driving distance,
> and has been a ham since she was 11 YEARS OLD!
>
> ..... B U T !!!!!!!!!! ....
>
> SHE HAS A BOYFRIEND!!!!!!!!!!!!!
>
> If there is a God, he is a mean, mean man ...
>

> --
John:

There is always hope until she ties the knot with someone else! Keep being witty and charming over packet, maybe even contact on voice. People have been know to change minds, get rid of boyfriends (and girlfriends) etc. If her current boyfriend is not a ham, you have an even better chance. Also, you may want to get an eyeball on her before salivating too much. Send her a New Years card (you have her callsign and a callbook, no?) and put in a picture <if you dare>.

Milti

--
==========

Opinions, thoughts, &cetera are my own (when I can remember them).

"He flies the sky KB7MSF
Like an Eagle in the eye UTAH
of a hurricane that's abandoned."

America

1195. FSK demod

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-27 16:45:46 UTC
From: ka7oei@uugate.wa7slg.ampr.ORG
Message-ID: <40649@uugate.wa7slg.ampr.org>
Source record: 50733

I take it that you are referring to the FSK signals carried on many FM stations under SCA (Secondary Carrier Authorization.) I might point out that it is technically illegal to demodulate some of these signals, but ironically, you can't tell if it is illegal unless you do:-)

For the demodulation of SCA FSK, a simple PLL demodulator (like the 565) is probably the easiest way to go. However, many FM receivers have a lot of phase/amplitude distortion in their IF, and/or their demodulators lack good phase/frequency/amplitude response. The result is that often, the low-level SCA subcarriers get clobbered by distortion from the demodulator by lower-frequency components. Multipath distortion also really kills such subcarriers.

The FSK chips (such as the MC3356 and MC13055 and other) use essentially an FM demodulator (yes, they all can be used for voice, etc.) followed by a simple data slicer. They use a floating slicing level (an ac-coupled signal input, really...) and a high-speed comparator. The MC3356 is rated to 500 kbaud (i.e. 250 KHz) and the MC13055 is rated to 2 megabaud. The '3356 could probably be pushed to over 1 mbaud and the '13055 has been pushed to 10 mbaud.

These chips work well but what would really make them work better is the filtering that you surround them. For simplicity, the 565 is a decent choice. Most '565 data books I have seen have specific examples of SCA demodulators...

<Clint>
clint@uugate.aim.utah.edu
ka7oei@uugate.wa7slg.ampr.org

1196. JVFax trans Problem

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-27 17:20:50 UTC
From: jschang@csie.nctu.edu.tw
Message-ID: <2fn5hi$a79@news.csie.nctu.edu.tw>
Source record: 50732

Hi. this is Jason from Taiwan.
Some of my friend meet some problem while using JVFax 6.0.
When they transfer via two "notebooks" ,the result is correct.
But once they use a desktop pc ,as we use often, the image received
become slope about 45 degree.
The most strange thing is if using notebook , it is ok. Only using
desktop pc will the problem appear. But the parameters setting are
all the same? We guess it may be asynchronous transferring, but
how does it happened since we using the same setting ???

Please help us ,thanks.
73 de Jason
--

CQ CQ de Jason Jason Chang
My Qth is Hsin Chu ,Taiwan (BV3) jschang@csie.nctu.edu.tw

1197. Re: So near and yet so far

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-27 17:27:46 UTC
From: luru@stekt6.oulu.fi
Message-ID: <LURU.93Dec27192746@stekt6.oulu.fi>
Source record: 50734
Cross-posted to: rec.radio.amateur.digital.misc,soc.singles,alt.personals

In article <2fdsh9$ljt@news.ysu.edu> ad815@yfn.ysu.edu (John S. Kennedy) writes:

> SHE HAS A BOYFRIEND!!!!!!!!!!!!!

> If there is a God, he is a mean, mean man ...

A man?

No man could be so cruel...

Luru

1198. Re: So near and yet so far

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-27 18:03:34 UTC
From: julian@bongo.tele.com
Message-ID: <1993Dec27.180334.4039@bongo.tele.com>
Source record: 50735
Cross-posted to: rec.radio.amateur.digital.misc,soc.singles,alt.personals

In article <msanders-271293091011@msanders.sim.es.com> msanders@sim.es.com (Milt Sanders) writes:
>
>There is always hope until she ties the knot with someone else! Keep being
>witty and charming over packet, maybe even contact on voice. People have
>been know to change minds, get rid of boyfriends (and girlfriends) etc. If
>her current boyfriend is not a ham, you have an even better chance. Also,
>you may want to get an eyeball on her before salivating too much. Send her
>a New Years card (you have her callsign and a callbook, no?) and put in a
>picture <if you dare>.

It should be a picture of your shack. Preferably with
impressive QSL cards in the background.

You could offer your excellent shack for use during contests.

--
Julian Macassey, N6ARE julian@bongo.tele.com Voice: (310) 659-3366
Paper Mail: Apt 225, 975 Hancock Ave, West Hollywood, California 90069-4074

1199. Re: So near and yet so far

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-27 22:30:25 UTC
From: msanders@sim.es.com
Message-ID: <msanders-271293153025@msanders.sim.es.com>
Source record: 50645

In article <LURU.93Dec27192746@stekt6.oulu.fi>, luru@stekt6.oulu.fi (Ari Husa) wrote:

> In article <2fdsh9$ljt@news.ysu.edu> ad815@yfn.ysu.edu (John S. Kennedy) writes:
>
> > SHE HAS A BOYFRIEND!!!!!!!!!!!!!
>
> > If there is a God, he is a mean, mean man ...
>
> A man?
>
> No man could be so cruel...
>
> Luru

Could it be said that a packet is a small bag; and that this lady is a "Packet Lady"? Oh, oh ....what have I started now? Maybe I should erase this and forget it? But, bandwidth is supposed to fun, is it not? Since I do packet myself, poke some fun back.

Uncle Milti

--
==========

Opinions, thoughts, &cetera are my own (when I can remember them).

"He flies the sky KB7MSF
Like an Eagle in the eye UTAH
of a hurricane that's abandoned."

America

1200. Requestion for Location of KA9Q FAQ

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-28 01:05:49 UTC
From: ack@clark.net
Message-ID: <2fo0pd$mru@explorer.clark.net>
Source record: 50736

I'm looking for an FAQ on the KA9Q software package. Does anyone
know where I can find such a beast?
--
Ack!
Creek, not creek; Pop not soda; Car needs washed...

1201. Xtal for Maxon DM-0530 data radio

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-28 02:11:40 UTC
From: paulus@macc.wisc.edu
Message-ID: <2fo4ks$eq9@geraldo.cc.utexas.edu>
Source record: 50739

Hi, I just got a pair of Maxon DM-0530, but there is no xtal inside.
Now the questions are:
- what are the frequency range of this data radio
- where can I get the xtals ?

Thanks for all pointers

Paulus

--
Paulus Suryono Adisoemarta
yono@ccwf.cc.utexas.edu
paulus@nextover.pe.utexas.edu
n5snn@n5snn.ampr.org

Newsgroups: rec.radio.amateur.digital.misc
Subject: Xtal for Maxon DM-0530
Summary:
Followup-To:
Distribution: usa
Organization: Petroleum Engineering Dept, U of Texas, Austin
Keywords:
Cc:

Hi, I just got a pair of Maxon DM-0530, but there is no xtal inside.
Now the questions are:
- what are the frequency range of this data radio
- where can I get the xtals ?

Thanks for all pointers

Paulus

--
Paulus Suryono Adisoemarta
paulus@nextover.pe.utexas.edu
n5snn@n5snn.ampr.org

1202. Add-ons to KPC-3

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-28 02:14:19 UTC
From: jfh@netcom.com
Message-ID: <jfhCIq3Jx.397@netcom.com>
Source record: 50738

Has anyone added the clock chip to their KPC-3? If so, how accurate is it and how much did it cost (AES is closed now, which they always are when I think about calling them, so I can't ask). Is there something special about the module Kantronics sells, or is it just a TI chip with a markup?

Similar question for the 128K RAM expansion. Will any old RAM suffice?

--

Jack Hamilton POB 281107 SF CA 94128 USA
jfh@netcom.com kd6ttl@w6pw.#nocal.ca.us.na

1203. Re: AA4RE BBS Program V2.1P

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-28 08:48:25 UTC
From: howardl@wb3ffv.ampr.org
Message-ID: <CIqLsp.8s4@wb3ffv.ampr.org>
Source record: 50640

Also as usual it is also available for BBS Download -or- Anonymous UUCP
from the WB3FFV Amateur Radio Bulletin Board System...

System Name: WB3FFV
User Login: bbs

Number: (410)-661-2475 -- 1200,2400,4800,7200,9600,12000,14400,19200,38400
(V.32/V.32bis/V.42/V.42bis/MNP1-5/HST)

Number: (410)-661-2598 -- 1200,2400,4800,7200,9600,12000,14400,19200,38400+
(V.32/V.32bis/V.42/V.42bis/MNP1-5/PEP/Turbo-PEP)

Number: (410)-661-2648 -- 1200 & 2400 (MNP1-5/V.42bis), 9600 & 19200 (PEP)

Data Settings: 8 Bits, NO Parity, 1 Stop Bit
Times: 24hrs/365days (except for routine maintenance)

1204. Re: Communication program for

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-28 12:57:24 UTC
From: ebo@algodones.unm.edu
Message-ID: <2fpafkINNata@lynx.unm.edu>
Source record: 50641

> I have tried many commercial and shareware! I finally settled on a shareware
> prog. called - "paKet 5.1" out of Australia! Easy to set up and excellent
> documentation especially for beginners!

Could you post the ftp sites and directories? I briefly looked around
and all I coud find was a paket51.exe somewhere in Germany... I would
have looked around, but it apears to be primetime there and the loads
are abismal...

Thanks,

EBo --

1205. Re: Communication program for packet

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-28 13:20:41 UTC
From: jwl@sedist.NoSubdomain.NoDomain
Message-ID: <1993Dec28.072042.26311@walter.cray.com>
Source record: 50642

In article <1993Dec23.184503.3342@uxmail.ust.hk>, ee_hflo@uxmail.ust.hk (Michael Lo) writes:
|> I am making my first tnc. Please tell me which communication program
|> for packet radio is suitable for beginners.
|>
|> Michael Lo
|>

Well, as the author of SimpTerm, I highly recommend that one.
It is available on simtel and its mirrors and on garbo. It
was designed specifically for amateur use and has a lot of
features for working with most any tnc. It has been released
as free software (since freeware is a trademark, so I understand, I
can't call it that). I highly recommend it to anyone that wants
to talk directly to his/her tnc/tu. A new version is in the works.

Write me for details!

73, de K4GVO, Jim.
--

Jim Lynch, Sales Analyst, Cray Research, Inc. / ARS: K4GVO
Southeast District, Phone: (404) 631-2254, Email: jwl@sedist.cray.com
Suite 270, 200 Westpark Drive, Peachtree City, GA 30269

1206. HELP: NOS with BAYCOM modem ?????

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-28 15:19:02 UTC
From: ian@g3nrw.demon.co.uk
Message-ID: <757091942snz@g3nrw.demon.co.uk>
Source record: 50643

I've been trying to make the following combination work:

PA0GRI NOS version 2.0m
Jalocha AX25 packet driver (January 1993)
Basic BAYCOM modem TCM3105 without hardware DCD
386 20MHz machine
No drivers or TSRs other than ANSI.SYS and KEYBD
No memory mapping/EMM or similar.
No DESQview -- just raw DRDOS 6, loaded low

(Standard BAYCOM 1.50a software works fine with vanilla AX25).
(GRI NOS with a PK88 TNC works fine with all protocols).

Symptoms are that "long" incoming packets (longer than about 100 bytes) are consistently dropped. I can hear the packets arriving (with the driver "beep" option enabled), but they don't appear on the trace, and they don't find their way to the associated session.

The behaviour is quite consistent: I can connect to a station with "connect", "telnet" or "ftp" without problem, but as soon as the corresponding server on the target machine sends a "long" message-of-the-day or other welcoming text, the session freezes. Comparing the trace against a similar session with the PK88 confirms that the "long" packet was dropped by the BAYCOM system.

I have tried all the combinations of the AX25 driver parameters that I think might make a difference, together with a number of different parameters in the "attach packet" command in autoexec.nos.

Also tried turning "multitask" and "isat" off. No difference.

Also tried a quick test with JNOS (can't remember the version number), which exhibits the same problem.

Any ideas?

73
Ian
--
+---------------------------------+--+
Ian Wade	e-mail: ian @ g3nrw.demon.co.uk
7 Daubeney Close, Harlington,	AMPRnet: g3nrw.ampr.org [44.131.5.147]
Dunstable, Beds, LU5 6NF, UK.	AX.25: G3NRW @ GB7BIL.#27.GBR.EU
+---------------------------------+--+

1207. Re: TNC for CB Frequecies

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-28 16:52:43 UTC
From: holland@gasmac.dom.uab.edu
Message-ID: <holland-281293105404@right.dom.uab.edu>
Source record: 50644

In article <CIMA89.3wM@ve6mgs.ampr.ab.ca>, mark@ve6mgs.ampr.ab.ca (Mark Gregory Salyzyn) wrote:
>
> holland@gasmac.dom.uab.edu (Steve Holland) writes:
>
> >In the CB frequency allocation there are some frequencies that
> >are skipped in the channel designations. If you have a synthesized
> >rig you could program the PLL to use one of those frequencies which
> >would put you off the "voice channels".
>
> And smack dab in the middle of some R/C channels, thank you very much ...
>
> It is Class D CB, so I gess they would be shitting in the mouth that feeds them

It is a pleasure to have ones ignorance so effectivly cured on the net!
I had thought these frequencies were sort of lost in the administrative
shuffel when the CB channels were expanded. Are all the CB freqs that
look unassigned on the channel allocation table RC frequencies? Isn't
it a little odd to put RC channels right in the midst of all those
voice channels, given that adjacent channel interference might really
mess up someones RC activities?

Steve Holland

1208. WNOS 4a9 NNTP part doesn't work

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-28 18:05:30 UTC
From: boulaisg@ingenierie.telecom.hydro.qc.ca
Message-ID: <boulaisg.1.2D20756A@ingenierie.telecom.hydro.qc.ca>
Source record: 50647

Hi,

I tried to run WNOS version 4a9 and it seem that the NNTP part doesn't to
run. Because if I try "start nntp" or if I try the command "?", the nntp
command is not there.

I am currently running Nos from WG7B version 107 succesfully (or i think...)

Is it me?????

Thanks for the response.
VE2GYB, Guy Boulais
Iberville, Quebec

1209. Re: TNC for CB Frequecies

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-28 18:30:13 UTC
From: jfw@ksr.com
Message-ID: <37713@ksr.com>
Source record: 50646

holland@gasmac.dom.uab.edu (Steve Holland) writes:
>It is a pleasure to have ones ignorance so effectivly cured on the net!
>I had thought these frequencies were sort of lost in the administrative
>shuffel when the CB channels were expanded. Are all the CB freqs that
>look unassigned on the channel allocation table RC frequencies? Isn't
>it a little odd to put RC channels right in the midst of all those
>voice channels, given that adjacent channel interference might really
>mess up someones RC activities?

Once upon a time, adjacent channel interference on CB was primarily caused by
accidentally damaged rigs, rather than by incompetantly "improved" rigs.

1210. MFJ 1814 Multimode Controller

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-29 07:13:12 UTC
From: asirene@ntuvax.ntu.ac.sg
Message-ID: <1993Dec29.151312.1@ntuvax.ntu.ac.sg>
Source record: 50648

Hello,
Has anyone here used the MFJ1814 Multimode controller? How does it
perform and can it receive PACTOR, Packet etc etc?
Tks,.
73s de 9VG Daniel

1211. Re: WNOS 4a9 NNTP part doesn't work

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-29 12:33:57 UTC
From: peter@globv1.hacktic.nl
Message-ID: <1993Dec29.123357.10221@globv1.hacktic.nl>
Source record: 50659

boulaisg@ingenierie.telecom.hydro.qc.ca (Guy Boulais) writes:

>Hi,

>I tried to run WNOS version 4a9 and it seem that the NNTP part doesn't to
>run. Because if I try "start nntp" or if I try the command "?", the nntp
>command is not there.

Then the NNTP stuff wasn't compiled into the executable. If you compile the
WNOS sources, and try to put everything in the NOS executable, then it will
be too big to run (it will bang it's head against the 640K wall). Therefore
people leave bits out of the executable and it seems that in your situation
it's NNTP that was left out...

Groetjes,
Peter Busser
--
Linux, the choice of a GNU generation.

1212. TCP/NOS for Windows?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-29 13:04:37 UTC
From: Ernest Nitka <ny000600@mail.nyser.net>
Message-ID: <2966259768.2.ny000600@mail.nyser.net>
Source record: 50650

Anyone out there aware of a NOS that runs either in Windows or that is a Windows program? I have currently been playing with Ian Wade's NOS but am curious about a windows product '73 n2pfl

1213. Macintosh NOS Users ...?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-29 13:18:00 UTC
From: kleite@sentry.ndhm.gtegsc.com
Message-ID: <kleite-291293081800@157.176.173.2>
Source record: 50649

Hello,
I have been running Net/Mac Nos on my packet system, I am wondering if there happens to be any other types of NOS's for the Macintosh that will work with packet ....???
I have looked everywhere on the internet, if anyone know's of any other types that will run on the Mac please let me know. Thanx!!!!

Keith Leite

AMPR: ka1aqb@switch.sema.ampr.org

E-mail Internet: kleite@sentry.ndhm.gtegsc.com

1214. Re: Add-ons to KPC-3

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-29 14:39:02 UTC
From: Burt.Kaufman@f40.n382.z1.fidonet.org
Message-ID: <757179027.AA00301@afarm.uucp>
Source record: 50601

-=> Quoting Jack Hamilton to All <=-
JH> Has anyone added the clock chip to their KPC-3? If so, how accurate
JH> is it and how much did it cost? Is there something special about the
JH> module Kantronics sells, or is it just a TI chip with a markup?
JH> Similar question for the 128K RAM expansion. Will any old RAM
JH> suffice?

The real-time clock upgrade consists of a Dallas Semiconductors DS1215 clock module and a 32.768 KHz crystal. About $20-25 plus shipping. Considering the cost, and the cutting/soldering on the printed circuit board, I decided to use software that sets the TNC clock from my PC.

I did install the 128K SRAM upgrade (and the 5.1 ROMs). The chip I installed bears this inscription:
HM628128LP-10
Kantronics says a 628128 is needed. I don't know what the rest of this designation is. Perhaps LP is low power, and the -10 is a speed designation? $25 when I ordered the ROM revision.

Burt N5SYY
... "Life is a series of rude awakenings." - Rip van Winkle
___ Blue Wave/QWK v2.12

1215. Re: TNC for CB Frequecies

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-29 15:48:00 UTC
From: mark@ve6mgs.ampr.org
Message-ID: <1993Dec29.154800.20401@ve6mgs.ampr.org>
Source record: 50655

holland@gasmac.dom.uab.edu (Steve Holland) writes:

>Are all the CB freqs that look unassigned on the channel allocation table RC
>frequencies?

Yes, as I indicated it is called Class D GMRS (CB).

>Isn't it a little odd to put RC channels right in the midst of all those
>voice channels, given that adjacent channel interference might really
>mess up someones RC activities?

Yes, and that is why many eventually move to other RC channels that are available (6M HAM, or 72 MHz). It used to be a sport, back in the Rubber Duck/Thunder Mike Era, to *shoot down* the airplanes ...

To not risk a flame war, and because I sense a lack of people that know the CB regulations in the *.cb group ... I have decided not to cross-post this article that would appear typical for rec.radio.cb ...

It is illegal to use Class C GMRS/CB (11M) for Packet Communications, and I may be chuckle headed by suggesting it be unkind to do it in the Class D service, but it may be legal for Class D operation in any case. Does anyone here know (US or Canada)? <Quietly grumbling to himself about setting up a 9600 Baud full news feed, point to point>

Any other license free frequencies that could be used for 2 mile range point to point medium speed links that *could* take alt.pink.bunnies.marketting (besides the earlier mentioned low field strength services)? Is there a free lunch?

Best of the Season, Ciao -- 73 de VE6MGS/Mark

1216. Re: TNC for CB Frequecies

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-29 16:27:08 UTC
From: msanders@sim.es.com
Message-ID: <msanders-291293092709@msanders.sim.es.com>
Source record: 50652

In article <37713@ksr.com>, jfw@ksr.com (John F. Woods) wrote:

> holland@gasmac.dom.uab.edu (Steve Holland) writes:
> >It is a pleasure to have ones ignorance so effectivly cured on the net!
> >I had thought these frequencies were sort of lost in the administrative
> >shuffel when the CB channels were expanded. Are all the CB freqs that
> >look unassigned on the channel allocation table RC frequencies? Isn't
> >it a little odd to put RC channels right in the midst of all those
> >voice channels, given that adjacent channel interference might really
> >mess up someones RC activities?

John:

I still have an RC system on 27 Mhz (27.045 and 27.145). As I can remember, the static ram is not so good these days, 26.995 and 27.255 were also there, along with a couple of others. I choose not to risk my airplanes on these frequencies due to interference. My RC xmtrs put out a max of 750 mw, more likely closer to 500 mw, and can very easily get swamped by even a 5 watt CB a little off frequency, much less a CB on a linear! I do use it for surface craft (boat). Not as dangerous for the equipment or spectators if interfered with. Also, not as likely to get interfered with since it is not high in the air (a local ham here says that the best accessary for a 2M HT is a 9000 foot mountain).

Most of the RC guys moved up to 72 Mhz when that band became available, plus the 6M guys on the ham band. Surface craft moved to 75 MHz. But I guess those 27 Mhz frequencies are still on the books, and a few guys use them (those who live in the desert away from civilization <heh, heh>.

Also the 27 MHz RC frequencies, if I recall correctly, were in use prior to the great explosion of CB when the "Rubber Duck" popular song came out -

"Put the pedal to the metal at the top of the ridge,
There's a picture takin' Smoky at side of the bridge,
10-4"

Memories, huh? Oh, well.

Milt

==========

Opinions, thoughts, &cetera are my own (when I can remember them).

"He flies the sky KB7MSF
Like an Eagle in the eye UTAH
of a hurricane that's abandoned."

America

1217. Requestion for Location o

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-29 16:31:43 UTC
From: Harry_s@holonet.net
Message-ID: <CIt1ww.3MD@iat.holonet.net>
Source record: 50651

```
> I'm looking for an FAQ on the KA9Q software package. Does anyone
> know where I can find such a beast?
>
Try anonymous ftp to ucsd.edu in /hamradio/packet/tcpip. The FAQ will
be for TCP/IP in general. You will also find the documentation for all
of the flavors of NOS in the various subdirectories here (e.g. KA9Q,
WG7J, etc.). For an overview, you might try NOSVIEW, which is a
hypertext instruction manual.
```

 KWQ/2 1.2b
--
Harry L. Styron (510) 932-4300 | I'd rather see a sermon,
harry_s@holonet fax: 933-3801 | than hear one, any day.
harry@wcrk.k6mfv.ampr.org | I'd rather have you walk with me,
CIS: 76456,2456 | with me, than merely tell the way.

1218. Wnos ListServer

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-29 16:32:38 UTC
From: pu5dkv@pu5dkv.ampr.ORG
Message-ID: <8980@pu5dkv.ampr.org>
Source record: 50673

Guy said:

> >I tried to run WNOS version 4a9 and it seem that the NNTP part doesn't to
> >run. Because if I try "start nntp" or if I try the command "?", the nntp
> >command is not there.

Hi, Guy. We are running Wnos 4a9, but not yet the 4a9 nntp stuff...:-(
(the 4a8 nntp looks good...)

But remember that before run nntp you must define the NNTP services with
the #define at your config.h

Btw:
There was a list to discuss Wnos related questions, but it was
turned off by the listserv mainteiner, as it seems...

In the meantime, we offer a new list to re-group wnos users, at
the Educational Software Lab (EDUGRAF-INE-UFSC-BRAZIL).

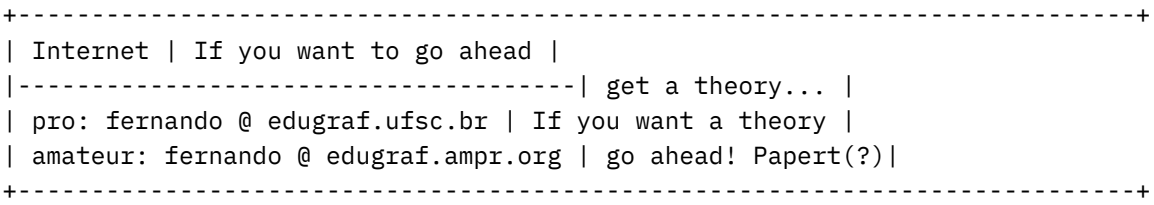
The idea is: all previous subscribers will automatically be added
to this list. Those who do not wish to stay in the new list are
asked to sign off after receiving the message telling they've
been added.

We are setting up and testing a Listserver for this purpose...
(I think it'll be operational in two weeks)

We want to install an anonymous FTP-server, too, with all wnos-related
stuff. We would be happy if people that have any usable stuff could
please point it to us.

So, that's an INVITATION to all wnos users: send us a mail and we
will maintain you updated with this effort..

73, and Happy New Year!


Internet | If you want to go ahead |
get a theory... |
pro: fernando @ edugraf.ufsc.br | If you want a theory |
amateur: fernando @ edugraf.ampr.org | go ahead! Papert(?)|

1219. Re: TCP/NOS for Windows?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-29 16:36:49 UTC
From: mack@ncifcrf.gov
Message-ID: <CIt25D.Izr@ncifcrf.gov>
Source record: 50653

In article <2966259768.2.ny000600@mail.nyser.net> "Ernest Nitka" <ny000600@mail.nyser.net> writes:
>Anyone out there aware of a NOS that runs either in Windows or that
>is a Windows program? I have currently been playing with Ian Wade's
>NOS but am curious about a windows product '73 n2pfl
Someone told me that NOS is a complete multitasking OS. If that's true then maybe you could run Windows under NOS :-).
Joe NA3T
mack@ncifcrf.gov

1220. Digital W/ Sb - Use Hamcom For Rtty

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-29 16:52:00 UTC
From: William.Boan@f239.n109.z1.fidonet.org
Message-ID: <aa3_9312291324@blkcat.fidonet.org>
Source record: 50656

Will HAMCOM work with an internal AM/FM demodulator? I'am looking for
a program to work with my MultiFax demodulator to receive RTTY, and
another or the same program for FAX.
If HAMCOM will not work with an internal demodulator, have you thought
about writting a program for them? I don't know if one program will
work with all the different AM/FM demodulator (Time Step, OFS,
MultiFax, ect...).
It sure would be nice to have a program with the features of HAMCOM for
them!
.
William

1221. Re: Macintosh NOS Users ...?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-29 17:23:18 UTC
From: jvp@tools1.ee.iastate.edu
Message-ID: <jvp.757185798@tools1.ee.iastate.edu>
Source record: 50654

In <kleite-2912930081800@157.176.173.2> kleite@sentry.ndhm.gtegsc.com (Keith J. Leite) writes:

> I have been running Net/Mac Nos on my packet system, I am wondering if
>there happens to be any other types of NOS's for the Macintosh that will
>work with packet ....???

If you just want to do AX.25 packet (not tcp/ip), you should check out the program I wrote, called Savant. Savant is a an AX.25 packet radio program written specifically for the Macintosh. It follows the Mac's user interface in every detail. It provides a multi-window/multi-connection interface and uses KISS mode so will work with almost any TNC. It also works with SoftKiss so will work with the PacketMac modem, or the Poor Man's Packet types.

A demo version is available on cpre1.ee.iastate.edu [129.186.205.32] in the pub/ke0ph directory. If you would like any more information, just let me know. I'd be glad to help in any way I can.

+---+
| Jim Van Peursem - Ph.D. Student - Ham Radio -> KE0PH |
| Department of Electrical Engineering and Computer Engineering |
| Iowa State University - Ames, IA 50011 |
| internet - jvp@iastate.edu -or- jvp@cpre1.ee.iastate.edu |
+---+

1222. Re: TCP/NOS for Windows?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-29 17:52:52 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1993Dec29.175252.21386@ke4zv.atl.ga.us>
Source record: 50657

In article <CIt25D.Izr@ncifcrf.gov> mack@ncifcrf.gov (Joe Mack) writes:
>Someone told me that NOS is a complete multitasking OS. If that's true then
>maybe you could run Windows under NOS :-).

Hah! NOS is a lightweight multitasker of it's compiled in routines. It's
not a full OS, nor will it multitask external programs. It would be great
if it could, but even Phil isn't that much of a masochist to try and write
a multitasking OS that'll run in real mode on a generic PC.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

1223. Re: Macintosh NOS Users ...?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-30 00:17:19 UTC
From: "Terry M. Stader KA8SCP" <p00489@psilink.com>
Message-ID: <2966299874.0.p00489@psilink.com>
Source record: 50660

>DATE: Wed, 29 Dec 1993 08:18:00 -0500
>FROM: Keith J. Leite <kleite@sentry.ndhm.gtegsc.com>
>
>Hello,
> I have been running Net/Mac Nos on my packet system, I am wondering if
>there happens to be any other types of NOS's for the Macintosh that will
>work with packet ....???
> I have looked everywhere on the internet, if anyone know's of any other
>types that will run on the Mac please let me know. Thanx!!!!

Keith... Jim's program (Savant) is very good... it is highly recommended.

As far as other TCP/IP applications... there is none. NET/Mac is based on the older NET application once ported over from the DOS world. There has been no apparent attempt to port NOS to the Mac. At one point there was going to be a re-write of NET to be called NET/Mac-Pro... but that has never shown up as the "commercial" product discussed several years back. It may still be something in the works.

NET/Mac works very well... Adam-PA2AGA has been making modificatiuons to it for quite sometime and has made significant contributions to it's operation. If you have not checked it out recently... you'll find the latest version, 2.3.34, can be found at ucsd.edu in the /hamradio/packet/tcpip/incoming directory.

Terry M. Stader, KA8SCP, America Online (AOL) Ham Radio Club Host
Macintosh Amateur Radio Software List Maintainer
Internet: tstader@aol.com or p00489@psilink.com
Packet: KA8SCP@WA1PHY.#EMA.MA.USA.NOAM

1224. AX.25 Specs needed

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-30 00:40:17 UTC
From: alte@rahul.net
Message-ID: <CItoJ6.L9B@rahul.net>
Source record: 50658

I need help to know where/how to get AX.25 documents/specifications.

Thanks.
--
Alte Technologies
6172 Bollinger Road, Ste 170A
San Jose, CA 95129
(408)996-7579

1225. Re: Macintosh NOS Users ...?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-30 04:10:05 UTC
From: wy1z@splinter.coe.neu.edu
Message-ID: <WY1Z.93Dec29231005@splinter.coe.neu.edu>
Source record: 50661

In article <2966299874.0.p00489@psilink.com> "Terry M. Stader KA8SCP" <p00489@psilink.com> writes:

Path: chaos.dac.neu.edu!noc.near.net!howland.reston.ans.net!darwin.sura.net!gatech!europa.eng.gtefsd.com!uunet!psinntp!wlnntp.psi.com!usenet
From: "Terry M. Stader KA8SCP" <p00489@psilink.com>
Newsgroups: rec.radio.amateur.digital.misc
Date: Wed, 29 Dec 93 20:17:19 -0400
Organization: PSI Public Usenet Link
Lines: 30
Reply-To: p00489@psilink.com
NNTP-Posting-Host: worldlink.com
X-Mailer: PSILink-DOS (3.6 BETA-4)

>DATE: Wed, 29 Dec 1993 08:18:00 -0500
>FROM: Keith J. Leite <kleite@sentry.ndhm.gtegsc.com>
>
>Hello,
> I have been running Net/Mac Nos on my packet system, I am wondering if
>there happens to be any other types of NOS's for the Macintosh that will
>work with packet ....???
> I have looked everywhere on the internet, if anyone know's of any other
>types that will run on the Mac please let me know. Thanx!!!!

Keith... Jim's program (Savant) is very good... it is highly recommended.

As far as other TCP/IP applications... there is none. NET/Mac is based on the older NET application once ported over from the DOS world. There has been no apparent attempt to port NOS to the Mac. At one point there was going to be a re-write of NET to be called NET/Mac-Pro... but that has never shown up as the "commercial" product discussed several years back. It may still be something in the works.

NET/Mac works very well... Adam-PA2AGA has been making modificatiuons to it for quite sometime and has made significant contributions to it's operation. If you have not checked it out recently... you'll find the latest version, 2.3.34, can be found at ucsd.edu in the /hamradio/packet/tcpip/incoming directory.

Terry M. Stader, KA8SCP, America Online (AOL) Ham Radio Club Host
Macintosh Amateur Radio Software List Maintainer
Internet: tstader@aol.com or p00489@psilink.com
Packet: KA8SCP@WA1PHY.#EMA.MA.USA.NOAM

In addition to ucsd, there is also a good selection of ham radio related mac programs on world.std.com in pub/hamradio/mac.

A demo version of Savant, version 1.0.1, is included there, too.

Also, PA2AGA's IM_Mac and NET_Mac area also available. His periodic updates as e-mailed to me, and I, in turn, place them onto World as soon as I receive the updates.

world.std.com is accessible via anonymous ftp, World Wide Web, and Gopher.

73,
Scott

--

==
| Scott Ehrlich Internet: wy1z@neu.edu BITNET: wy1z@NUHUB |
Amateur Radio: wy1z AX.25: wy1z@k1ugm.ma.usa.na
Maintainer of the Boston Amateur Radio Club hamradio FTP area on
the World - world.std.com pub/hamradio
==

1226. Re: FSK demod

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-30 10:24:46 UTC
From: jukka@jybox.jyu.fi
Message-ID: <ZV4cFc2w165w@jybox.jyu.fi>
Source record: 50662

acsys@crl.com (Acsys Inc.) writes:

> Also has anyone seen the FM receiver chips from motorola? They seem to
> have a data output that will detect FSK modulation at any rate between
> 1200 and 36000 baud, how do these work? The block diagram looks like
> it is done with some kind of comparater. Is this a better way to go
> than using a pll?
>
I have build a couple of RX's with MC3363Works fine... It does not
detect FSK so I have used a FSK-detector chip after it. I just do not
remember the type :) It works fine for 115kbps, newer tried faster.

Jukka, OH6MWQ

-- Jukka Pappinen (jukka@jybox.jyu.fi)

1227. Re: AX.25 Specs needed

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-30 11:35:40 UTC
From: djk@brains.axion.bt.co.uk
Message-ID: <2fueec$4ic@brains.cartoon.bt.co.uk>
Source record: 50663

From article <CItoJ6.L9B@rahul.net>, by alte@rahul.net (Charles Liu):
> I need help to know where/how to get AX.25 documents/specifications.
>
The ARRL have published the specification of the AX25 protocol and is
available direct from them, mail order.

1228. Re: So near and yet so far

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-30 16:22:07 UTC
From: rlt@cbnewsl.cb.att.com
Message-ID: <CIuw56.G6u@cbnewsl.cb.att.com>
Source record: 50664
Cross-posted to: rec.radio.amateur.digital.misc,soc.singles,alt.personals

In article <msanders-271293091011@msanders.sim.es.com> msanders@sim.es.com (Milt Sanders) writes:
$In article <2fdsh9$ljt@news.ysu.edu>, ad815@yfn.ysu.edu (John S. Kennedy) $wrote:

>> Yes, boys and girls ... it finally happened ... I met a young
>> lady ON PACKET who is ... get this ... 21, within driving distance,
>> and has been a ham since she was 11 YEARS OLD!

>> ..... B U T !!!!!!!!!! ....

>> SHE HAS A BOYFRIEND!!!!!!!!!!!!!

$There is always hope until she ties the knot with someone else! Keep being $witty and charming over packet, maybe even contact on voice. People have $been know to change minds, get rid of boyfriends (and girlfriends) etc. If

Good points...

$her current boyfriend is not a ham, you have an even better chance. Also,

Don't count on this bit. Sure, it can be nice dating another ham, but it gets to be a drag when he wants to use *my* shack all the time! :-)

Just one woman's opinion...

Roberta AA2KZ

1229. WNOS 4a9 NNTP part doesn'

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-30 16:24:43 UTC
From: Harry_s@holonet.net
Message-ID: <CIuw98.n4q@iat.holonet.net>
Source record: 50665

```
> I am currently running Nos from WG7B version 107 succesfully (or i
> think...)

Why don't you subscribe to the NOS-BBS or NOS-BBS-DIGEST mailing lists
on hydra@carleton.ca? These are the raw and digested discussion lists
for users and programmers of JNOS (WG7J NOS).
```

 KWQ/2 1.2b
--
Harry L. Styron (510) 932-4300 | I'd rather see a sermon,
harry_s@holonet fax: 933-3801 | than hear one, any day.
harry@wcrk.k6mfv.ampr.org | I'd rather have you walk with me,
CIS: 76456,2456 | with me, than merely tell the way.

1230. Re: So near and yet so far

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-30 17:32:50 UTC
From: holland@gasmac.dom.uab.edu
Message-ID: <holland-301293113750@right.dom.uab.edu>
Source record: 50666

In article <CIuw56.G6u@cbnewsl.cb.att.com>, rlt@cbnewsl.cb.att.com (r l taylor) wrote:
>
> In article <msanders-271293091011@msanders.sim.es.com> msanders@sim.es.com (Milt Sanders) writes:
> $In article <2fdsh9$ljt@news.ysu.edu>, ad815@yfn.ysu.edu (John S. Kennedy)
> $wrote:
>
> >> Yes, boys and girls ... it finally happened ... I met a young
> >> lady ON PACKET who is ... get this ... 21, within driving distance,
> >> and has been a ham since she was 11 YEARS OLD!
>
> >> ..... B U T !!!!!!!!!! ....
>
> >> SHE HAS A BOYFRIEND!!!!!!!!!!!!!
>
> $There is always hope until she ties the knot with someone else! Keep being
> $witty and charming over packet, maybe even contact on voice. People have
> $been know to change minds, get rid of boyfriends (and girlfriends) etc. If
>
> Good points...
>
> $her current boyfriend is not a ham, you have an even better chance. Also,
>
> Don't count on this bit. Sure, it can be nice dating another ham, but it
> gets to be a drag when he wants to use *my* shack all the time! :-)

Does she have big tubes or little transistors in her finals? On the other hand, it is probably better to judge people by their operating practices rather then their equipment.

1231. Re: AX.25 Specs needed

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-30 18:04:00 UTC
From: jvp@tools1.ee.iastate.edu
Message-ID: <jvp.757274640@tools1.ee.iastate.edu>
Source record: 50667

In <2fueec$4ic@brains.cartoon.bt.co.uk> djk@brains.axion.bt.co.uk (Dirk Koopman) writes:

>From article <CItoJ6.L9B@rahul.net>, by alte@rahul.net (Charles Liu):
>> I need help to know where/how to get AX.25 documents/specifications.
>>
>The ARRL have published the specification of the AX25 protocol and is
>available direct from them, mail order.

Also the 7th or 8th Computer Network Conference proceedings has SDL
(basically flow charts) of an implementation of AX.25. Well worth the
purchase price if you're going to do an implementation!

+---+
| Jim Van Peursem - Ph.D. Student - Ham Radio -> KE0PH |
| Department of Electrical Engineering and Computer Engineering |
| Iowa State University - Ames, IA 50011 |
| internet - jvp@iastate.edu -or- jvp@cpre1.ee.iastate.edu |
+---+

1232. Re: AX.25 Specs needed

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-30 18:36:28 UTC
From: montp@vortex.eng.sc.rolm.com
Message-ID: <2fv73c$s6m@vortex.eng.sc.rolm.com>
Source record: 50669

In article <2fueec$4ic@brains.cartoon.bt.co.uk>,
Dirk Koopman <djk@brains.axion.bt.co.uk> wrote:
>From article <CItoJ6.L9B@rahul.net>, by alte@rahul.net (Charles Liu):
>> I need help to know where/how to get AX.25 documents/specifications.
>>
>The ARRL have published the specification of the AX25 protocol and is
>available direct from them, mail order.

The AX.25 protocol is also available online via ARRL's mail server.
Send email to "info@arrl.org" with just "help" in the body and it will
end you instructions.

73,
km6wt - mont

1233. Flexar 440 repeater

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-30 18:42:01 UTC
From: lyman@a3bee2.radnet.com
Message-ID: <1993Dec30.184201.17144@a3bee2.radnet.com>
Source record: 50668

I have a 440mhz Motorola Flexar repeater that will be coming out of service
at the end of January. This unit puts out 25Watt, I have it set at 10Watts, ANd has run
flawlessly for over 1 year. The unit includes miniplexers (Notch type),
Power supply.
The receiver and the Repeater Interface Controller (RIC) are housed in the
same case. The transmitter and power supply are located in a flexar base housing
there is also a DC remote interface installed. Comes with PL deck for both RX
and TX. The unit is totally stock as it comes from Motorola. There is no IDer or
control functions. The RIC just controls the ptt and cor.
The reason for removing is simple, I need a larger wick (power). This orginaly
came out of service from the 469mhz area and now is running an 449mhz. There
were no mods required to bring it down if frequency. I also have a service
manaul for the unit.
I am asking $500.00 for the unit. It is in mint shape. And need a good home.

****
* William S. Lyman Jr Compusoft *
* Wallingford, CT 06492 Email UUCP lyman@a3bee2 *
* (203) 294-0323 Voice Email Internet lyman@a3bee2.radnet.com *
* (203) 265-7017 Data Packet Radio n1nwp@n1nwp.ampr.org *
****

1234. Sorry

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-30 18:50:20 UTC
From: lyman@a3bee2.radnet.com
Message-ID: <1993Dec30.185020.17379@a3bee2.radnet.com>
Source record: 50670

I posted the repeater in the wrong group. Sorry No Flames PLEASE!

1235. Re: TCP/NOS for Windows?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-30 19:17:04 UTC
From: ian@g3nrw.demon.co.uk
Message-ID: <757279024snz@g3nrw.demon.co.uk>
Source record: 50678

In article <2966259768.2.ny000600@mail.nyser.net> ny000600@mail.nyser.net writes:

>Anyone out there aware of a NOS that runs either in Windows or that
>is a Windows program? I have currently been playing with Ian Wade's
>NOS but am curious about a windows product '73 n2pfl

Sorry, you can't blame me for NOS ..... :-) You'll find that PA0GRI
is the person responsible for the NOS in "NOSview"....

Good luck in your search!

73 and Happy New Year to all.
Ian Wade, G3NRW

--
+---------------------------------+--+
Ian Wade	e-mail: ian @ g3nrw.demon.co.uk
7 Daubeney Close, Harlington,	AMPRnet: g3nrw.ampr.org [44.131.5.147]
Dunstable, Beds, LU5 6NF, UK.	AX.25: G3NRW @ GB7BIL.#27.GBR.EU
+---------------------------------+--+

1236. Re: AX.25 Specs needed

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-30 19:22:19 UTC
From: pineapp@netcom.com
Message-ID: <pineappCIv4H9.2tJ@netcom.com>
Source record: 50671

In article <2fueec$4ic@brains.cartoon.bt.co.uk> djk@brains.axion.bt.co.uk writes:
>From article <CItoJ6.L9B@rahul.net>, by alte@rahul.net (Charles Liu):
>> I need help to know where/how to get AX.25 documents/specifications.
>>
>The ARRL have published the specification of the AX25 protocol and is
>available direct from them, mail order.

Are we still using 1980 CCITT Specifications? Has anyone heard if there
has been an upgrade to the CCITT AX.25?

--
.--+-------------------------.
INTERNET: pineapp@netcom.com (DC436)	Daniel Curry WB6STW
AMPRNET : dan@wb6stw.ampr.org [44.4.20.144]	E-:-) Ham Radio Operator
AX.25 : wb6stw@n0ary.#NOCAL.CA.USA.NA	Redwood City, CA USA
'--+-------------------------'

1237. Wnos Fkeys?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-30 19:52:02 UTC
From: hopken@interaccess.com
Message-ID: <2fvbh2$s1d@mailhost.interaccess.com>
Source record: 50672

Hi All. I love Wnos BUT I can't live without Fkeys. Since all of the Fkeys in my version of Wnos are used to change sessions, I wondered if anybody had done any work on keeping say 3 Fkeys to change sessions and let the rest be programmable? How often does anyone have 9 channels open at a time? Any thoughts or suggestions?

--
==========
Ken Hopkins WA9WCP | Internet - HOPKEN@interaccess.com
Disaster Team - | AMPRnet - 44.72.1.162
American Red Cross | AX.25 - WA9WCP@W9ZMR.IL.USA

1238. Re: WNOS 4a9 NNTP part doesn't work

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-30 22:55:23 UTC
From: njbirdman@delphi.com
Message-ID: <9312301752591.njbirdman.DLITE@delphi.com>
Source record: 50674

As I am sure someone else told you, your "executable" was no doubt
compiled without the NNTP. Same thing happened to me. Go FTP to
ftp.ece.orst.edu :pub/ham/wg7j and try V1.10x15 of JNOS. Excellent NNTP!
73,
John N4JS

.. Don't you hate when that happens??

~ TLX v3.20/D-LITE2.02 ~

1239. Re: AX.25 Specs needed

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-31 02:31:57 UTC
From: brian@nothing.ucsd.edu
Message-ID: <2g02utlNN48t@network.ucsd.edu>
Source record: 50675

<pineappCIv4H9.2tJ@netcom.com> pineapp@netcom.com (Daniel Curry) writes:
>has been an upgrade to the CCITT AX.25?

Uh, AX.25 and X.25 aren't the same thing. In fact, the names are more
similar than the protocols are.
- Brian

1240. Re: AX.25 Specs needed

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-31 04:08:49 UTC
From: wy1z@bach.coe.neu.edu
Message-ID: <WY1Z.93Dec30230849@bach.coe.neu.edu>
Source record: 50676

In article <2fv73c$s6m@vortex.eng.sc.rolm.com> montp@vortex.eng.sc.rolm.com (Mont Pierce) writes:

Path: chaos.dac.neu.edu!grapevine.lcs.mit.edu!think.com!cass.ma02.bull.com!spool.mu.edu!sdd.hp.com!portal!mack!not-for-mail
From: montp@vortex.eng.sc.rolm.com (Mont Pierce)
Newsgroups: rec.radio.amateur.digital.misc
Date: 30 Dec 1993 10:36:28 -0800
Organization: ROLM - A Siemens Company
Lines: 16
References: <CItoJ6.L9B@rahul.net> <2fueec$4ic@brains.cartoon.bt.co.uk>
NNTP-Posting-Host: vortex.eng.sc.rolm.com

In article <2fueec$4ic@brains.cartoon.bt.co.uk>,
Dirk Koopman <djk@brains.axion.bt.co.uk> wrote:
>From article <CItoJ6.L9B@rahul.net>, by alte@rahul.net (Charles Liu):
>> I need help to know where/how to get AX.25 documents/specifications.
>>
>The ARRL have published the specification of the AX25 protocol and is
>available direct from them, mail order.

The AX.25 protocol is also available online via ARRL's mail server.
Send email to "info@arrl.org" with just "help" in the body and it will
end you instructions.

73,
km6wt - mont

Not to forget that the files from the ARRL's infoserver are also FTP-able
from world.std.com (192.74.137.5) in the directory:
pub/hamradio/ARRL/server-files

73,
Scott

--

==
| Scott Ehrlich Internet: wy1z@neu.edu BITNET: wy1z@NUHUB |
Amateur Radio: wy1z AX.25: wy1z@k1ugm.ma.usa.na
Maintainer of the Boston Amateur Radio Club hamradio FTP area on
the World - world.std.com pub/hamradio
==

1241. Gracilis PackeTen on AX.25?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-31 05:23:42 UTC
From: dave@eram.esi.com.au
Message-ID: <5070@eram.esi.com.au>
Source record: 50677

We're looking at putting up a PackeTen switch as a backbone switch, and I heard this it does not handle "straight" AX.25 connections. Is this right? If so, it would limit its usefulness somewhat (and please spare me the lectures about weaning people away from AX.25 - this is a political situation, and it is desirable, if not outright necessary, that it support the AX.25 mob).

--
Dave Horsfall (VK2KFU) VK2KFU @ VK2RWI.NSW.AUS.OC PGP 2.3
dave@esi.COM.AU ...munnari!esi.COM.AU!dave available

1242. NE567 or XR2206? Help!

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-31 11:08:03 UTC
From: asirene@ntuvax.ntu.ac.sg
Message-ID: <1993Dec31.190803.1@ntuvax.ntu.ac.sg>
Source record: 50679

Hi,
I am trying to build a data decode, can anyone advise me whether to use
the NE567 or XR2206? Which is better? Docs, Specs? How do I use the XR2206?
Tks, need info pronto!

73s de 9VG Daniel

1243. Formats for SITOR/PACTOR/WWIV/digital?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-31 11:10:18 UTC
From: asirene@ntuvax.ntu.ac.sg
Message-ID: <1993Dec31.191018.1@ntuvax.ntu.ac.sg>
Source record: 50680

Hi,
Does anyone know where I can find the data formats/protocols/tones etc
etc for digital signals on HF such as SITOR/PACTOR etc etc? Also is it possible
to decode WWV signals to get time for computer clock adjustment? What is the
format? Tks. I am trying to write a software to decode these stuffs. Tks.

73s de 9VG Daniel

1244. Re: Gracilis PackeTen on AX.25?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-31 12:24:37 UTC
From: ghitz@world.std.com
Message-ID: <CIwFt2.FDs@world.std.com>
Source record: 50681

Dave Horsfall (dave@eram.esi.com.au) wrote:
: We're looking at putting up a PackeTen switch as a backbone switch, and
: I heard this it does not handle "straight" AX.25 connections. Is this
: right? If so, it would limit its usefulness somewhat (and please spare
: me the lectures about weaning people away from AX.25 - this is a political
: situation, and it is desirable, if not outright necessary, that it support
: the AX.25 mob).

: --
: Dave Horsfall (VK2KFU) VK2KFU @ VK2RWI.NSW.AUS.OC PGP 2.3
: dave@esi.COM.AU ...munnari!esi.COM.AU!dave available

Dave,

Gracilis has an internet address: info@gracilis.com
Perhaps you can get the answer to your question that
way.

73 de George, W1DA

--
%%%

1245. Re: AX.25 Specs needed

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-31 13:12:42 UTC
From: pineapp@netcom.com
Message-ID: <pineappCIwI16.ACI@netcom.com>
Source record: 50682

In article <2g02utINN48t@network.ucsd.edu> brian@nothing.ucsd.edu (Brian Kantor) writes:
><pineappCIv4H9.2tJ@netcom.com> pineapp@netcom.com (Daniel Curry) writes:
>>has been an upgrade to the CCITT AX.25?
>
>Uh, AX.25 and X.25 aren't the same thing. In fact, the names are more
>similar than the protocols are.
> - Brian

Brian,
I do realized that X.25 and AX.25 are not the same. But if you order
the ARRL manual for AX.25. It will state in the manual that this is 1980
vintage.

--
.--+-------------------------.
INTERNET: pineapp@netcom.com (DC436)	Daniel Curry WB6STW
AMPRNET : dan@wb6stw.ampr.org [44.4.20.144]	E-:-) Ham Radio Operator
AX.25 : wb6stw@n0ary.#NOCAL.CA.USA.NA	Redwood City, CA USA
'--+-------------------------'

1246. NOS Flavors

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-31 14:23:27 UTC
From: hopken@interaccess.com
Message-ID: <2g1ckv$o7t@mailhost.interaccess.com>
Source record: 50683

How about one of you NOS gurus posting a little note about the different flavors of NOS. There are a bewildering variety of versions, updates, features, etc. It would be nice to make sure I'm using the "right" version.
Tnx in advance for your help!
P.S. I hope somebody will soon write a version that has a scroll back buffer so you can go back and look at what just rolled off the screen. If PacketGold can do it, why can't we?
--
==========
Ken Hopkins WA9WCP | Internet - HOPKEN@interaccess.com
Disaster Team - | AMPRnet - 44.72.1.162
American Red Cross | AX.25 - WA9WCP@W9ZMR.IL.USA

1247. How to use XR2211?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-31 16:28:08 UTC
From: asirene@ntuvax.ntu.ac.sg
Message-ID: <1994Jan1.002808.1@ntuvax.ntu.ac.sg>
Source record: 50687

Hi,
I need help on how to use the XR2211 (Specs, Data, Pinouts, Schematics, etc.). I intend to use this PLL for decoding RTTY/CW/Fax/Wefax/SSTV/SITOR/AMTOR and other high speed data up to 56k bps. Is this possible, if so then how do I use this chip. If not, is there a simple alternative?

Thanks for any advise.

Happy New Year
Daniel

1248. Looking for information

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-31 16:30:28 UTC
From: jangus@skyld.tele.com
Message-ID: <757355428snx@skyld.tele.com>
Source record: 50590

Doesn't anyone read books any more?
Doesn't anyone go the the library and look for something themselves?
Doesn't anyone look in technical publications for information?

What is it about the internet that seems to breed the following attitude?

"I don't want to expend the effort to
look so can someone else do it for me?"

Along a similar thread, how is it that no one seems to think of the
manufacturers as a source of information?

Are you people really that cheap, lazy or stupid?

Not that the ARRL amateur radio handbook is the be all to end all,
but it is two inches thick for a reason. Likewise, QST is loaded
full of advertisements. (As several others complain about.)

Dialing 411 (In the US) gets you directory assistance. Dialing
1 (area code) 555-1212 gets you directory assistance for any other
area code. Dialing 1 800 555-1212 gets you the free number directory
assistance for those of you too cheap to call someone direct.

Now I know there are a lot of obscure technical aspects to amateur
radio, but geeze people. Get off of your tail ends and look around
a bit before you waste every one elses time.

And before the self appointed guardians of the net jump on me about
the remark of wasting my time, consider this, I don't think there are
any stupid questions. But there sure are a lot of unnecessary ones.

73 es GM from Jeff

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA | "It is difficult to imagine our
Internet: jangus@skyld.tele.com | universe run by a single omni-
US Mail: PO Box 4425 Carson, CA 90749 | potent god. I see it more as a
Phone: 1 (310) 324-6080 | badly run corporation."

1249. RTTY/SITOR/AMTOR/FEC help!

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-31 16:31:07 UTC
From: asirene@ntuvax.ntu.ac.sg
Message-ID: <1994Jan1.003107.1@ntuvax.ntu.ac.sg>
Source record: 50688

Hi,
What is the difference between Baudot, Sitor, AMTOR, FEC?
Are their formats sufficiently similar for the same hardware to
decode or are there some major differences which need separate
hardware? Or are the differences merely in the transport layer,
which can be resolved in software without needing to knock out the
hardware? Thanks for any advise on the abov.

73s de 9VG Daniel

1250. MFJ1214 multimode controller? How is it?

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-31 16:36:56 UTC
From: asirene@ntuvax.ntu.ac.sg
Message-ID: <1994Jan1.003656.1@ntuvax.ntu.ac.sg>
Source record: 50689

Hi,
Has anyone here used the MFJ 1214 IBM multimode controller?
How does it perform? Should I get one? Can it do SITOR/FEC? with the right
software (that I might write?) Tks,

73s de 9VG Daniel

1251. AX.25 Specs obtained

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-31 17:37:04 UTC
From: alte@rahul.net
Message-ID: <CIwu9t.Go@rahul.net>
Source record: 50685

Thanks to all the responses.

Next, I would be interested in any AX.25 implementations.

--
Alte Technologies
6172 Bollinger Road, Ste 170A
San Jose, CA 95129
(408)996-7579

1252. AX.25 Implementation needed

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-31 17:42:41 UTC
From: alte@rahul.net
Message-ID: <CIwuJ5.291@rahul.net>
Source record: 50686

I need help in knowing how/where to get any implementation of AX.25.

Thanks in advance.
--
Alte Technologies
6172 Bollinger Road, Ste 170A
San Jose, CA 95129
(408)996-7579

1253. AX.25 Specs needed

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-31 17:50:07 UTC
From: Harry_s@holonet.net
Message-ID: <CIwuvJ.Mz0@iat.holonet.net>
Source record: 50684

> I need help to know where/how to get AX.25
> documents/specifications.

Try the American Radio Relay League, 225 Main St., Newington, CT
06111. There is an internet address, but I would be guessing. Telephone
is 203 666-1541. It is publication 0119, entitled "AX.25 Link Layer
Protocol", costs $8.

--
Harry L. Styron (510) 932-4300 | I'd rather see a sermon,
harry_s@holonet fax: 933-3801 | than hear one, any day.
harry@wcrk.k6mfv.ampr.org | I'd rather have you walk with me,
CIS: 76456,2456 | with me, than merely tell the way.

1254. ALINCO 1200T DATA RADIO

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-31 19:52:17 UTC
From: doug.ferrell@exchange.tlh.fl.us
Message-ID: <9312311952.A6383wk@exchange.tlh.fl.us>
Source record: 50592

I've been looking to upgrade my packet station and have had an eye
on the Alinco 1200T data radio. Can someone shed some light as to
why this radio was "made" for data? How does it differ from a
conventional 2mtr radio (other than it does not include a mic)?

::
: Doug Ferrell, KD4MOJ (904) 575-7119 Voice :
: THE EXCHANGE! TelCom (800) 832-0722 Voice :
: 3123 Louist St (904) 575-6577 FAX :
: Tallahassee FL 32304-2724 (904) 575-6872 BBS :
: Inet: doug@exchange.tlh.fl.us :
::

• OLX 2.2 • Tallahassee -- Where it rains on EVERYBODY'S parade.

1255. Re: NE567 or XR2206? Help!

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-31 20:31:17 UTC
From: dave@llondel.demon.co.uk
Message-ID: <757395077snx@llondel.demon.co.uk>
Source record: 50598

In article <1993Dec31.190803.1@ntuvax.ntu.ac.sg> asirene@ntuvax.ntu.ac.sg writes:
>Hi,
> I am trying to build a data decode, can anyone advise me whether to use
>the NE567 or XR2206? Which is better? Docs, Specs? How do I use the XR2206?
>Tks, need info pronto!
>
Out of the two you quote, I would use the NE567 because the XR2206 is not
a PLL device! (It is a tone generator.) I think you meant the XR2211. I would
rate the XR2211 as better than the NE567 but that is because I could never
get an NE567 to work properly!

Dave
--

****
* G4WRW @ GB7WRW.#41.GBR.EU AX25 * Start at the beginning. Go on *
* dave@llondel.demon.co.uk Internet * until the end. Then stop. *
* g4wrw@g4wrw.ampr.org Amprnet * (the king to the white rabbit) *
****

1256. Re: Looking for information

Newsgroup: rec.radio.amateur.digital.misc
Date: 1993-12-31 23:12:56 UTC
From: hopken@interaccess.com
Message-ID: <2g2blp$739@mailhost.interaccess.com>
Source record: 50591

Jeffrey D. Angus (jangus@skyld.tele.com) wrote:

: Doesn't anyone read books any more?
: Doesn't anyone go the the library and look for something themselves?
: Doesn't anyone look in technical publications for information?

: What is it about the internet that seems to breed the following attitude?

: "I don't want to expend the effort to
: look so can someone else do it for me?"

: Along a similar thread, how is it that no one seems to think of the
: manufacturers as a source of information?

: Are you people really that cheap, lazy or stupid?

: Not that the ARRL amateur radio handbook is the be all to end all,
: but it is two inches thick for a reason. Likewise, QST is loaded
: full of advertisements. (As several others complain about.)

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: 1 (area code) 555-1212 gets you directory assistance for any other
: area code. Dialing 1 800 555-1212 gets you the free number directory
: assistance for those of you too cheap to call someone direct.

: Now I know there are a lot of obscure technical aspects to amateur
: radio, but geeze people. Get off of your tail ends and look around
: a bit before you waste every one elses time.

: And before the self appointed guardians of the net jump on me about
: the remark of wasting my time, consider this, I don't think there are
: any stupid questions. But there sure are a lot of unnecessary ones.

: 73 es GM from Jeff

Gee Jeff, lighten up. I've been a ham for 30 years and the best part for
me has always been the friendly exchange of information, the learning
process, and the ability to help out some of the newer hams. Or maybe
it was one of my questions that you thought not necessary.
--
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Ken Hopkins WA9WCP | Internet - HOPKEN@interaccess.com
Disaster Team - | AMPRnet - 44.72.1.162
American Red Cross | AX.25 - WA9WCP@W9ZMR.IL.USA